Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

April 22, 1957

RECEIVED
APR 22 1957
THE CHEMISTS' CLUB
LIBRARY

For PURITY UNIFORMITY

"AA QUALITY"

CONTROLLED CHEMICALS

Tested from raw material to finished product, you can count on AA Quality Controlled Chemicals always—to give you highest possible quality and uniformity. Write today for further information and Free samples. Backed by over 85 years of experience.

THE AMERICAN AGRICULTURAL CHEMICAL COMPANY · AA QUALITY

TRISODIUM, DISODIUM PHOSPHATE, Anhydrous & Crystalline
PHOSPHORIC ACID 75% Food Grade
PHOSPHORIC ACID 85% N. F. Grade
PHOSPHORUS PENTASULPHIDE · PHOSPHORUS SESQUISULPHIDE
PHOSPHORUS RED AMORPHOUS
AMMONIUM, MAGNESIUM, SODIUM and ZINC SILICOFLUORIDE
POTASSIUM SILICOFLUORIDE
SODIUM FLUORIDE and AMMONIUM FLUOBORATE
PHOS-FEED® BRAND DICALCIUM PHOSPHATE

Phone or Write Chemical Sales Division

The AMERICAN AGRICULTURAL CHEMICAL Co.
50 Church Street, New York 7, N. Y. • BArclay 7-1400
P.O. Drawer 2458, Detroit 31, Mich. • Vinewood 2-0146

'SHARPLES' brand

ORGANIC SULFUR COMPOUNDS

METHYL MERCAPTAN
ETHYL MERCAPTAN
C_3-C_4 MERCAPTANS
AMYL MERCAPTAN
tert-DODECYL MERCAPTAN
DIMETHYL SULFIDE
DIETHYL SULFIDE
THIOPHENE

For additional information, write to Dept. O:

Pennsalt Chemicals
INDUSTRIAL DIVISION
PENNSYLVANIA SALT MANUFACTURING CO.
3 Penn Center · Philadelphia 2, Pa.

NOW *TECH GRADE*

COBALT SALTS

COBALT ACETATE
COBALT CARBONATE
COBALT CHLORIDE
COBALT NITRATE
COBALT SULFATE

Baker CHEMICALS
J. T. BAKER CHEMICAL CO.
PHILLIPSBURG, N. J.
New York · Chicago · Philadelphia · Los Angeles

HIGH QUALITY

SODIUM SULPHATE

PRIOR CHEMICAL CORPORATION
420 LEXINGTON AVENUE
NEW YORK
CABLE: PRIORCHEM NEW YORK
PHONE: LExington 2-9811

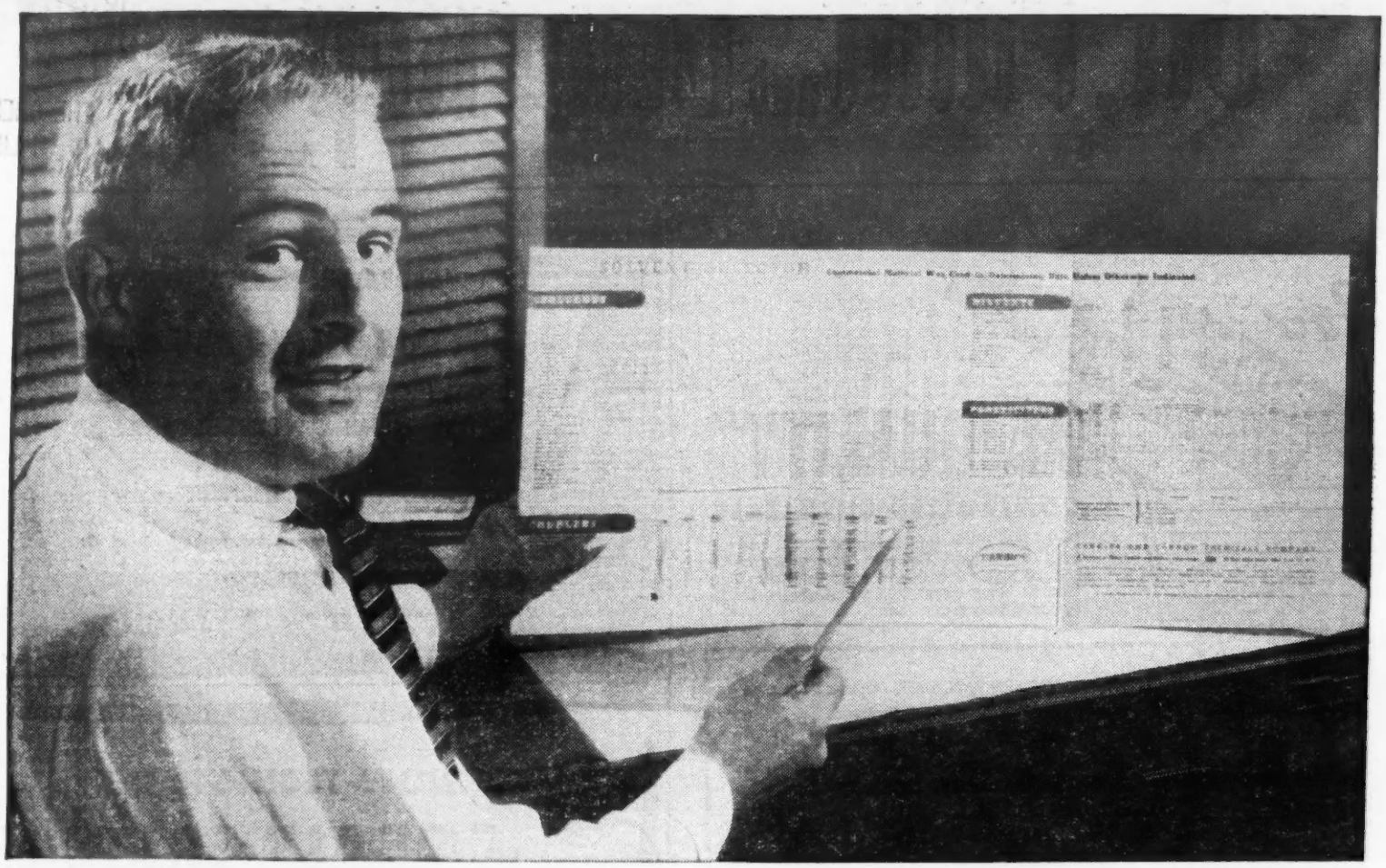
INDUSTRIAL and PHARMACEUTICAL CHEMICALS

R. W. GREEFF & CO., INC.
10 Rockefeller Plaza, New York 20, N. Y.
1721 Tribune Tower, Chicago, Ill.

BORESTER®
Boric Acid Esters
Write for Composite Data Sheet

Boric Acid Esters in a wide variety: Straight Chain Branched Chain · Ring and Cage Structure including Stable, Solid and Liquid Forms

U. S. Borax & Chemical Corporation
PACIFIC COAST BORAX COMPANY DIVISION
MANUFACTURERS OF FAMOUS "20 MULE TEAM" PACKAGE PRODUCTS
100 Park Avenue, New York 17, N. Y. 630 Shatto Place, Los Angeles 5, California



Looking for the best type of **Solvent?**

"CARBIDE'S" SOLVENT SELECTOR CAN HELP YOU.

The Solvent Selector is written to provide you with unbiased, essential data on active solvents, couplers, and diluents—a total of almost 70 compounds.

To help save your time, this information also is arranged for immediate reference and comparison. Just send in the handy coupon for your copy of the Solvent Selector.

Whatever your solvent needs, you'll always benefit from the availability of CARBIDE's complete range of esters, ketones, alcohols, and glycol-ethers—plus many other types of solvents for specialized applications. The big benefit is that you can choose the solvent or solvent combination which best suits your requirements. In addition, CARBIDE's strong raw material position assures you of constant availability and dependable delivery.

CARBIDE
AND CARBON
CHEMICALS

Carbide and Carbon Chemicals Company
A Division of
Union Carbide and Carbon Corporation
30 East 42nd Street New York 17, N. Y.

In Canada: Carbide Chemicals Company
Division of Union Carbide Canada Limited, Montreal and Toronto

Send in this coupon for your copy of the Solvent Selector.

CARBIDE AND CARBON CHEMICALS COMPANY
Room 308, 30 East 42nd Street, New York 17, N. Y.

Please send me the Solvent Selector—a six-page folder presenting the latest data on solvents, plasticizers, couplers and diluents.

Name_____

Company_____

Street_____

City_____ Zone_____ State_____

Oil, Paint and Drug Reporter

Vol. 171 No. 16 30 Church St., New York 7, N. Y. April 22, 1957

RECEIVED APR 22 1957
THE CHEMISTS' CLUB LIBRARY

Chemical Products Makers Facing Tighter Labeling Laws Under New 'Hazard' Measure

A federal labeling control law in the vast field of household polishes, cleaners, some paints and coatings materials and a host of other chemical specialties which might be considered "hazardous" is being proposed in the senate. If enacted, the law will prohibit manufacturers from selling or distributing such products unless clearly labeled to identify the hazard and the precautionary measures to be taken for protection of life and health. Sen. Prescott Bush of Connecticut is sponsor of the bill (S. 1900) which is the result of extended consultations with government officials and industry representatives and grows out of the rising numbers of products now being offered for sale to the public which are unidentified as being injurious or hazardous to health unless handled with caution.

Demand for Protection Increasing

It is also in response to the increasing demand for more public protection against the hazards of misuse as shown by the increasing numbers of control centers being set up throughout the country to supply information on antidotes and means of treating persons injured by such articles.

The bill is essentially a misbranding measure and is patterned somewhat along the lines of the misbranding sections of the federal food, drug and cosmetic law. It would deny the privileges of interstate commerce to any article which was not labeled in accordance with the requirements of the law and the regulation of the Department of Health, Education and Welfare. Any products moving in commerce in violation of the law would be subject to seizure and destruction.

Although exempted from its provisions are packages and articles now subject to the FDA law, packages and articles now subject to the federal insecticide, fungicide, and rodenticide act, and packages and substances intended for use in agricultural, horticultural, or related opera-

—Continued on page 55

SALES COMPANY HEAD: Alexander McFarlane, vice-president and general sales manager of Corn Products Refining Company, New York, elected president of Corn Products Sales Company.

Interhandel Gains Delay

The scheduled sale next May 13 of the government's stockholdings in General Aniline & Film Corporation has been postponed indefinitely by Attorney General Herbert Brownell, jr.

Assistant Attorney General Dallas S. Townsend, director of the Office of Alien Property, stated that the postponement was requested by the attorneys for certain stockholders of Interhandel, a Swiss firm which, prior to World War II, was the record holder of most of the General Aniline stock.

These Interhandel stockholders have appealed to the United States Court of Appeals for the District of Columbia from the district court's denial of their motions to enjoin the sale of the stock by the Attorney General.

Under a stipulation signed April 12, these Interhandel stockholders have agreed to accelerate their appeal in the courts of appeals, Mr. Townsend said, as well as any petition they may make to the Supreme Court of the United States, without using all of the time allowed them by court rules.

On his part, the Attorney General agreed that he would not sell the shares until thirty days after the decision of the court of appeals, or if a petition is filed with the supreme court within that time, until after the supreme court has disposed of such a petition.

A new time schedule for the sale will be announced at a later date.

The agreement with the stockholders was reached soon after the senate judiciary committee had voted to report a bill directing that sale of the stock be held up by the government until congress can decide on a policy as to the disposition of former enemy-owned assets which the United States seized during World War II.

The Administration is sponsoring legislation for the return of all such property having a value of $10,000 or less to former owners, and providing for sale of other properties which are in excess of that amount.

Agriculture Research Increase Is Seen as Key to New Markets

A tripling of current appropriations for research on agricultural products and a broad program of research grants and contracting with colleges and private corporations to develop new markets for farm products are the principal recommendations made to congress last week by the President's Bipartisan Commission on Increased Industrial Use of Agricultural Products. In an interim report on studies that have been under way for the past nine months on how the plight of agriculture might be improved through research, the commission turned thumbs down on the widely urged project of compulsory use of grain alcohol as a motor fuel as being wholly impractical, but renew its proposal for encouraging the use of grains to make alcohol for butadiene production (OPD 4/1/57).

The commission, however, was unable to agree upon a specific recommendation for activation of the existing alcohol and butadiene plants, but felt that vigorous research to determine costs and discover outlets in the fields is needed and that the potentials for utilization of grains in this direction should be fully explored.

The basic position of the commission is that intensive research for new markets

—Continued on page 44

IN OPERATIONS POST: John P. Hyde, promoted to newly-created position of operations manager for Diamond Alkali Company's silicate, detergent, calcium division.

Pesticide Output to Resume Following Explosion at Nitro

Limited insecticide production at Monsanto Chemical Company's Nitro, W. Va., plant, wracked last week by an estimated $1 million explosion, will be resumed within a month to six weeks.

The insecticide unit, which manufactures methyl and ethyl parathion, remained 30 percent operative following the explosion. Estimates are that 80 percent capacity will be reached in a few months. Production of ethyl parathion, the spokesman said, will be resumed within a month to six weeks. The methyl parathion section, where the explosion took place in a chlorinator, will take longer.

Delhi-Taylor to Mine Potash

Delhi-Taylor Oil Corporation, Dallas, Tex., plans to produce potash from its properties in Utah. Dr. Elton Soltes, project supervisor of the Utah property, told stockholders last week that potash income should start around 1960. The company plans to increase drilling activity in Louisiana during 1957.

Metal & Thermit President Weathers Long Proxy Fight

H. E. Martin has been re-elected president of Metal & Thermit Corporation, Rahway, N. J., following a proxy fight which stood at an impasse for eight months. Mr. Martin headed a group of eight board members backed by American Can Company, who were elected last week.

Prior to the election, the board had been evenly divided into two groups, the Canco-backed group advocating a rapid expansion and development of the company.

This group had been opposed by a group of independent stockholders headed by John F. Condon, secretary-treasurer of the company. The Condon group sought in vain to postpone the annual meeting until some time in June, and to void all proxies solicited by the Martin forces.

Barium Monohydrate Unit Planned by S-W

Plans for immediate construction of a new plant to produce barium monohydrate have been announced by Sherwin-Williams Company, Cleveland, Ohio. S. B. Coolidge, vice-president and director of auxiliaries for the firm, said the new facility would be built adjacent to the company's barium carbonate plant at Coffeyville, Kan.

A new process developed by Sherwin-Williams will be used for the production of barium hydrate direct from barytes ore, Mr. Coolidge indicated that patent appli-

—Continued on page 54

Nat'l Lead Expenditures This Year to Surpass 1956

National Lead Company, New York, expects it capital expenditures in 1957 to surpass those of 1956. So reported President Joseph A. Martino at a stockholders' annual meeting last week.

Capital expenditures this year will include a part of the cost of new expansion at the St. Louis, Mo., titanium pigments plant, Mr. Martino said. It is expected that 25,000 tons of titanium dioxide will be added to the plant's annual capacity, beginning in 1958.

Monsanto Chairman Looks at the Future

How does the future look to Monsanto Chemical Company, St. Louis, Mo.? That was a rhetorical question asked by the company's board chairman, Edgar M. Queeny, at the recent annual meeting.

Here is what Mr. Queeny had to say:

"What are our projections for 1957? We dislike forecasting. Too many factors over which we may have no control can prevent the realization of forecasts. But all factors of which we have knowledge

—Continued on page 71

Barbiturate Bill Passage Seen Doubtful This Year

The Boggs bill, HR 503, to tighten federal controls over the distribution of barbiturates and amphetamine drugs is running into unexpected opposition in congress that makes its passage this year doubtful.

Members are raising serious questions over whether the bill is not an invasion of state authority and say that they plan to study it "at great length" before deciding whether to go along with it.

This was disclosed at initial hearings before the health and science subcommittee of the house interstate commerce committee last week, where chairman John B. Williams of Mississippi first raised the issue of states rights and other members joined in to question whether additional authority is actually needed by the Food and Drug Administration to carry out the government's responsibilities.

Outgrowth of the large amount of publicity given to the misuse of the two drugs in recent years, the bill has four principle features as follows:

- It declares in effect, that barbiturates and amphetamines are products of interstate character and are subject to federal control at all levels of distribution.
- It requires all manufacturers to register with FDA.
- It requires all manufacturers, wholesalers and retailers to keep records on distribution and make them available for inspection.
- It makes unauthorized possession of the drugs a federal offense.

John L. Harvey, deputy Commissioner

—Continued on page 39

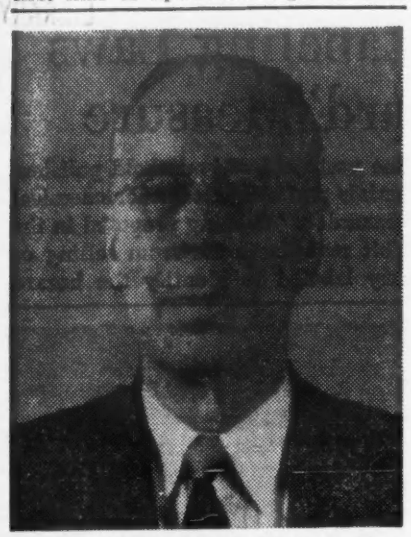
Dow Glycerine Unit Going Up in Texas

Construction of a second synthetic glycerine plant is under way at its Texas Division, Freeport, Tex., the Dow Chemical Company has announced.

Completion of the new plant, scheduled for next March, will double Dow's present glycerine capacity. The second plant, like the first, will use a Dow-developed process involving propylene and chlorine as starting materials.

Polio Vaccine Demand Seen Greater Than the Future Supply

Although recent releases of Salk polio vaccine have tended to ease the supply shortage somewhat, the Public Health Service expects demand to continue to exceed supply for sometime to come. Surgeon General Leroy E. Burney says that 5.2 million cubic centimeters of newly-produced vaccine were released during the first half of April and larger amounts are expected in the latter half of the month. During the first week of April, Dr. Burney pointed out, supplies on hand in health departments, drug stores, and doctors' offices, as reported by the states, increased from about 3.1 million cc. to about 3.7 million cc.



CHOSEN VICE-PRESIDENT: Edwin C. Abrahamsen, elected to a vice-presidency by Burroughs Wellcome & Co., Tuckahoe, N. Y.

59 Million Received 'Shots'

The Surgeon General reported that over 59 million Americans have received one or more injections since the vaccine first became available two years ago, on April 12, 1955. Many of these persons, however, need second or third injections to complete the recommended schedule of three doses.

During the past week several steps have been taken to promote more efficient use of the vaccine during the temporary shortage, Dr. Burney said. On April 9 a letter was sent to all vaccine producers transmitting suggestions for distribution which were developed during a March 30 meeting with representatives of the American Medical Association, the National Foundation for Infantile Paralysis, and the Association of State and Territorial Health Officers.

The group proposed that the manufacturers might consider giving first priority to southern states because of the earlier inception of the polio season there. It was also suggested that favorable consideraion be given to communities which, for the present, are placing emphasis on vaccinating people through twenty and pregnant women.

Dr. Burney said that the March 30 conference was in unanimous agreement that vaccinating all persons at least through the age of forty should remain the ulti-

—*Continued on page 60*

Dixon, Crayon Firm Complete Merger Plan

Joseph Dixon Crucible Company, Jersey City, N. J., and American Crayon Company, Sandusky, Ohio, have completed a merger, from which American Crayon survives as a division of Dixon.

Earl Curtis, American Crayon president, has been elevated to chairman of the board of the new division. Leland P. Spore, formerly executive vice-president, has been elected president and also has been named to the Dixon board of directors. Lynn Curtis continues as vice-president.

Other divisional officers elected were Ernst Van Blarcum, secretary and treasurer; Harold G. Schaeffer, assistant treasurer, and Peter Spore, assistant secretary.

No personnel changes are contemplated

—*Continued on page 49*

Nat'l Distillers Alters Name

Stockholders of National Distillers Products Corporation, New York, have approved management's recommendation that the corporate name be changed to National Distillers & Chemical Corporation, effective on May 1. The new name reflects the corporation's extensive activities in the industrial chemicals field, which it entered in 1950.

Heyden Newport Revamps Company Research Setup

Realignment of the research department of Heyden Newport Chemical Corporation, New York, has been announced by Simon Askin, president. The research organization of the Newport Industries division and the Heyden Garfield, N. J., research organization will be integrated into a single research department under the direction of Dr. Herman Sokol, vice-president of research and development.

Dr. Carl Bordenca has been appointed director of research. He joined Newport in 1956 as assistant to the president. Previously he was assistant director of Southern Research Institute in Birmingham, Ala., and served also with Visking Corporation and Alabama Polytechnic Institute.

Dr. J. Harry Stump has been appointed manager of research at Newport Industries' Pensacola, Fla., laboratories. Dr. Stump joined Newport in 1947 as a research chemist and has been assistant chemical director since 1951.

The Week's Price Changes

Tin, Potassium Stannate, Stannous Chloride and Sulfate Rise. H Acid, Alpha Ionone and Methyl Ionone Prices Decline.

Prices Advanced

Castor oil, No. 1 Brazilian, ¼c. per lb. (p. 65).
Coconut oil, crude, ¼c. per lb. (p. 65).
Copra, $1.50 per ton (p. 65).
Greases, ⅛c. per lb. (p. 65).
Linseed meal, 50c. per lb. (p. 65).
Potassium stannate, 9 10c. per lb. (p. 36).
Sodium stannate, 1c. per lb. (p. 36).
Stannic chloride, 9 10c. per lb. (p. 36).
Stannic oxide, 1c. per lb. (p. 36).
Stannous chloride, anhyd., 1.2c. per lb. (p. 36).
Hydrous, cryst., 1c. per lb.
Stannous sulfate, 1.2c. per lb. (p. 36).
Tallow, inedible, ½c. per lb. (p. 65).
Tin, 1¼c. per lb. (p. 36).
Valonia beards, $12 per ton (p. 61).
Cups, $19 per ton (p. 61).
Extract, ¾c. per lb. (p. 61).

Prices Reduced

Aluminum paste, std., 3c. per lb. (p. 62).
Blood, dried, New York, 25c. per unit-ton (p. 41).
Citronellol, 20c. per lb. (p. 58).
Corn oil, crude, ¼c. per lb. (p. 65).
Refd., ¼c. per lb.
Cottonseed oil, crude, ¼c. per lb. (p. 65).
Refd., ¼c. per lb.
Geraniol, 20c. per lb. (p. 58).
H acid, 10c. per lb. (p. 46).
a-Ionone, 30c. per lb. (p. 58).
Lard, cash, 4/10c. per lb. (p. 65).
Methyl ionone, 30c. per lb. (p. 58).
Molasses, New Orleans, ½c. per gal. (p. 42).
Soybean oil, crude, ⅜c. per lb. (p. 65).
Refd., ⅜c. per lb.

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

April 19, 1957	April 12, 1957	April 20, 1956
110.97	110.85	108.62

Druggists Lag in Vet Medicine

Druggists were warned last week that drug stores were handling only a trifling 28 percent of all livestock and poultry preparations. Speaking before the American Animal Health Pharmaceutical Association at the Texas hotel, Houston, Tex., Jackson S. Gouraud, veterinary products manager of Chas. Pfizer & Co., Brooklyn, N. Y., warned that this was "too narrow a slice of the market." Faced with intense competition from supermarkets and other sources, pharmacists no longer can afford to let the animal health department "fend for itself," Mr. Gouraud said in a talk on boosting profits through sales promotion.

He suggested rural pharmacists become a "fount of information" on animal health, serving farmers and furnishing literature and visual materials to county agents, "vo-ag" teachers and other farm service organizations.

Farmer Turns to Pharmacist

Thus, he said, the pharmacist will be associated with animal health in the minds of the farmers, who will automatically turn to him for information and preparations. Mr. Gouraud exhibited motion picture films, film strips and brochures which, he said, were part of a "wealth of material" available from Pfizer for such purposes.

He suggested the rural pharmacist make an initial presentation at a luncheon and then sponsor an evening event, with outside speakers. An exhibit at the county fair each year, "preferably in a booth," provides an "ideal opportunity both to dis-

—*Continued on page 56*

Formaldehyde Plant Opened by Borden

Borden Company, New York, has opened its second formaldehyde and resins plant at Fayetteville, N. C. The plant is geared to produce 36 million pounds of formaldehyde annually.

From the formaldehyde the plant will also make urea resins for plywood, furniture, paper, and textile applications. The plant also serves as a warehouse for polyvinyl acetate and polyvinyl alcohol.

Colgate-Palmolive Splits Domestic Business in Two

Colgate-Palmolive Company, Jersey City, N. J., is splitting up its domestic business into separate parts. Under the plan, a household products division and a toilet products division will be set up.

The household products division will handle advertising, sales, and other aspects as soaps, detergents and cleaners. The toilet products division will handle toothpaste and other products.

DPI Names Mees Pres., Hecker Gets V. P. Post

Graham C. Mees has been named president and John C. Hecker vice-president and general manager of Distillation Products Industries, a division of Eastman Kodak Company. Mees joined Eastman in 1933 and was named assistant vice-president of DPI in 1942. He became vice-president in 1945. Hecker, also joining the company in 1933, was named works manager in 1949 and vice-president in charge of production and technical operations in 1952.

Carbide Elects Officers

A. Lyndon Foscue, Birny Mason, jr., and Edwin B. Suydam have been elected vice-presidents and appointed members of the appropriations committee of Union Carbide & Carbon Corporation, New York.

Index to News and Market Reports

Association News

Chlorine Institute Meeting Set..... 37
Coke, Coal Institute to Meet..... 7
Cotton Group to Hear Benson..... 7
DCAT Post Goes to Stokes..... 7
Pharmaceutical Ass'n Plans Meeting.... 7

Government News

Agriculture Research Stressed..... 3
Barbiturate Bill Passage Unlikely..... 3
Butter Substitute Imports Cut..... 60
Chemicals Makers Face 'Hazard' Bill..... 3
Herbicide Research Boon to Legumes... 7
Navy Told to Justify Paint Making..... 5
Pesticide Tolerance Rule Sought..... 49
Synthetic Narcotics Bill Gaining Strength. 7
Tin, Tungsten Methods Developed..... 39

Industry News

Barium Monohydrate Unit Planned..... 3
Carbide Will Spend $170 Million..... 7
Chemical Firms Grant Day-After Holidays 7
Chemical Materials Featured at Fair.... 5
Cokeoven Contract Awarded..... 5
Davison Building Unit..... 7
Delhi-Taylor in Aromatics Field..... 5
Delhi Taylor to Mine Potash..... 3
Dixon, Crayon Complete Merger..... 4
Dow Glycerine Unit Going Up..... 3
Druggists Lag in Vet Medicine..... 4
Escambia Building Research Center..... 5
Ethylene Plant on Stream This Year..... 5
European Chemical Moves..... 37
Formaldehyde Plant Opened..... 4
Heyden Newport Revamps Setup..... 4
Hooker Fills Board Post..... 38
Monsanto Chairman Eyes Future..... 3
Nat'l Distillers Alters Name..... 4
Nat'l Lead Expenditures to Pass '56.... 3
Pesticide Output to Be Resumed..... 3
Pitts. Coke Unit to Make Ferromanganese 5
Polio Vaccine Supply Tight..... 4
Republic, Nat'l Lead Form Firm..... 48
Shell to Build Platformer..... 5
Standard to Make Fragrances..... 5
Tidewater Operating Solvent Unit..... 60

International News

Hunt Sets Up Export Unit..... 37
ICA Authorizes Funds..... 38
Interhandel Gains Delay..... 3
McKesson Will Make Drugs in Iran..... 57
"Orinase" Available in Canada..... 5
Phenol Export Decline Seen..... 57
Western Chemicals Elects..... 5

Personnel News

American Gilsonite Elects..... 49
Burroughs Wellcome Names V.P..... 4
Carbide Elects Officers..... 4
Celanese Names Ainsworth..... 5
Colgate Splits Management..... 4
Color Association Elects..... 7
Corn Products Names McFarlane..... 3
Corn States Elects Marmon..... 57
Diamond Names Hyde..... 3
DPI Names Mees..... 4
Metal & Thermit President Wins..... 3
Pfizer Elects..... 39
Sun Oil Elects Wright..... 54

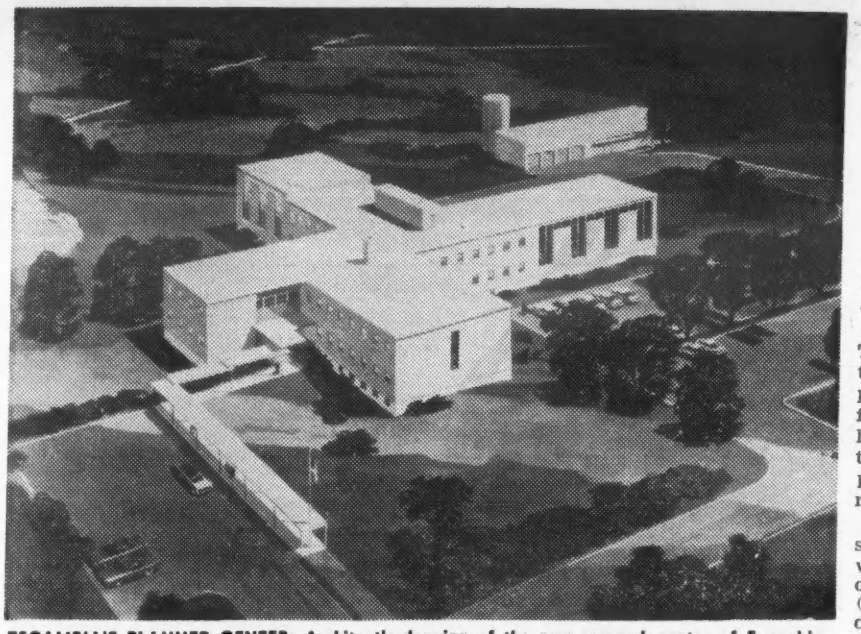
Market Reports

Acids..... 36
Agricultural Chemicals..... 41
Aliphatic Organics..... 42
Aromatic Chemicals..... 58
Botanical Drugs, Gums..... 51
Coal Chemicals..... 46
Coatings Materials..... 62
Drugs..... 51
Essential Oils..... 58
Fats and Greases..... 65
Fertilizer Materials..... 41
Fine Chemicals..... 51
Heavy Chemicals..... 36
Industrial Organic Chemicals..... 42
Lacquer Materials..... 62
Leather Chemicals..... 61
Naval Stores..... 62
Oil Cake and Meal..... 65
Oils..... 65
Paint Materials..... 62
Pesticides..... 41
Petrochemicals..... 42
Petroleum Derivatives..... 45
Protective Coatings Materials..... 62
Spices..... 58
Textile Chemicals..... 61
Waxes..... 65

General Features

Advertisers Index..... 71
Association Meeting Dates..... 7
Bids Wanted..... 70
Book Reviews..... 34
Classified Advertisements..... 70
Consulting Chemists and Engineers..... 54
Coal Chemical Output..... 46
Crude Oil Stocks..... 45
Current Market Quotations..... 9
Data Offered..... 49
Editorials..... 34
Imports..... 56
Jobs & People..... 40
Obituaries..... 38
OPD Price Index..... 4
Washington Talks It Over..... 34

Oil, Paint and Drug Reporter, Vol. 171. No. 16, April 22, 1957. Published every Monday by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U. S. A. Subscription prices—United States and possessions, $5 a year; Canada and Newfoundland, $7; other countries $10. Entered as second-class matter, January 15, 1884, at the New York Post Office under the act of March 3, 1879. **Copyright, 1957, by Schnell Publishing Company, Inc.**



ESCAMBIA'S PLANNED CENTER: Architect's drawing of the new research center of Escambia Chemical Corporation, being built on a forty-six acre site at Wilton, Conn.

Escambia Chemical Constructing A Research Center in Wilton, Conn.

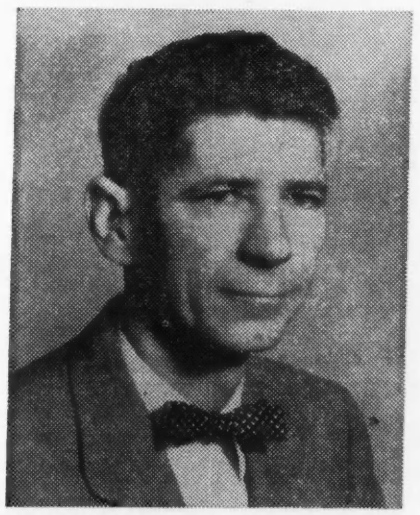
Construction of a research center at Wilton, Conn., has been started by Escambia Chemical Corporation, New York, according to Dr. Nat C. Robertson, vice-president and director of research. The new center, a 50,000-square-foot building on a forty-six-acre site, will provide for research and development activities and customer and technical laboratories of Escambia. Specifically, its work will include research activities in petrochemicals, the plastics industry and in related fields. Dr. Robertson will be in charge of the center. He will be assisted with the business affairs by Robert G. Reed as business manager.

Since Escambia Chemical was organized in 1954, it has conducted its own research and technical service activities at facilities in Cambridge and Newton, Mass., owned by National Research Corporation and will continue there until Escambia occupies its new center early in 1958.

Organized in 1954, Escambia Chemical opened its first unit, an ammonia and ammonium nitrate fertilizer plant, at Pensacola, Fla., in December, 1955. This plant currently is serving the agricultural southeastern region of the nation with anhydrous ammonia, ammonium nitrate solutions ("Bay-Sol") and ammonium nitrate concentrates ("Ammo-Nite").

Production recently began at an adjacent polyvinyl chloride resins plant which is producing vinyls for the plastics industry.

Meantime, construction is underway on a third unit, a methanol plant, which is scheduled for completion early in 1958.



LAB MANAGER: Bruce S. Ainsworth, appointed manager of the chemical division application laboratory at the Summit, N. J., research laboratories of Celanese Corporation of America.

Ethylene Plant Going On Stream This Year

An ethylene plant being built by Petroleum Chemicals, Inc., at Lake Charles, La., is being readied to go on stream by the end of the year. Lummus Company, New York, which designed and is building the new facilities, has provided for a 50 percent expansion from an annual rate of 200 million pounds to 300 million pounds.

The plant will use Lummus' ethylene process and will draw refinery gases supplemented with LPG from the nearby refineries of Cities Service Company and

—*Continued on page 71*

'Orinase' Diabetes Drug Now Available in Canada

Release of "Orinase" in Canada for general use has been announced by the Canadian Department of Health and National Welfare. The new drug, which can be taken by mouth to control symptoms of diabetes for the majority of sufferers, has been made available for sale in Canada on physician's prescription.

"Orinase," a trade name for tolbutamide, a distant chemical cousin of the sulfa drugs, has no antibacterial action. It has demonstrated an ability to lower blood sugar—essential to treatment of dia-

—*Continued on page 57*

Western Chemicals Elects

Western Chemicals, Ltd., Edmonton, Alta., Canada, has appointed H. Milton Martin, jr., general manager. Since 1937, Mr. Martin has been with Dominion Tar & Chemical Company.

Navy Told It Must Justify Paint Making as Needed Activity Or Face Cut in Its Budget

The Navy department is now on notice that unless it can present sound justification for continuing its paint manufacturing operations it faces a sharp cut in appropriations at the hands of congress. The warning comes from Sen. Edward J. Thye of Minnesota, chairman of the senate small business subcommittee, which opened an investigation of the navy's paint producing activities last week. Sen. Thye said that there are a few business-type products and services that must be produced and performed by government for valid reasons of national security. But, he added, under our form of government there is nothing that can take the place of private enterprise in meeting ordinary needs of government.

Representatives of the department insisted that they have no objections to private industry supplying the paint needs of the navy if three conditions can be met: (1) quality control assuring delivery of only specification materials; (2) quantities called for by the department, and (3) deliveries when and where needed.

'Poor Quality' Paint Claimed

They said that in the past the department has received some "poor quality" paints from private industry. This fact could not be detected, even in the laboratories, it was added. But the officials admitted that the same thing has been experienced with the paints produced in the department's own plants. The trouble, they said, was improper mixing which might happen anytime supervision is relaxed.

The question of closing down the navy's two paint plants at Mare Island, Calif., and Norfolk, Va., has been a prime subject of consideration for several years. In 1955 orders were issued to close the plants, but were rescinded after the house appropriations committee insisted on the right to veto such orders. New orders have now been drawn up and are under study by assistant Secretary of Defense Perkins McGuire. The navy's office of small business has recommended that they be closed.

Industry's arguments against continued operation of the two navy plants were given to the committee by Daniel Boland, general counsel for the National Paint, Varnish and Lacquer Association; Ralph H. Everett, executive vice-president of M. J. Merkin Paint Company, New York.

—*Continued on page 54*

Shell Oil Co. to Build Platformer in Louisiana

A multimillion dollar platforming unit to expand production of high octane gasoline will be constructed at Shell Oil Company's Norco refinery in Louisiana.

The platformer will increase the octane number of more than a half million gallons per day of gasoline components used for blending into premium gasoline fuel. It is expected to be completed by the summer of 1958.

The platformer will consist of two sections. The first, a desulfurizer, will remove the sulfur present in gasoline stocks manufactured in other units at the refinery. In the second section of the process, the octane number of the desulfurized gasoline stocks will be increased by means of a process using the platinum catalyst.

Standard to Make Fragrances

The manufacture and sales of perfumes to the cosmetic industry by Parfums Orelay, Scotch Plains, N. J., has been discontinued, and the fragrances for cosmetics hitherto made by that company will be made by Standard Aromatics, Inc., New York, according to an announcement issued by the two firms.

Harry W. Dudley

Delhi-Taylor Moving Into Aromatics Field

Delhi-Taylor Oil Corporation, Dallas, Tex., has decided to move into the aromatics field. The company is building a $4 million plant at Corpus Christi, Tex., and has just created a new chemical division in New York with Harry W. Dudley as its general sales manager.

The plant will go on stream about July 1, with initial production including benzene, toluene and xylene. It will utilize the Udex Extraction Process and will have an annual capacity of 45 million gallons.

Mr. Dudley was formerly associated with Pittsburgh Coke & Chemical Company for nine years. Prior to that he was with Eastman Kodak Company and Socony Mobil Oil Company.

Delhi-Taylor Oil Corporation is a large, independent crude oil producer in Kansas, Louisiana, New Mexico, Oklahoma, Texas and Wyoming.

Pitts. Coke Subsidiary To Make Ferromanganese

Pittsburgh Coke & Chemical Company plans to begin production and sale of ferromanganese through a new wholly-owned subsidiary, Neville Ferro Alloy Company, in 1957.

This was among facts about the company released last week in a first quarter report to shareholders by Henry L. Hillman, Pittsburgh Coke's president.

Mr. Hillman reported that the company has made substantial investment in a program to produce ferromanganese for the steel industry.

Expansion of the company's activated carbon plant is currently under way, and it is expected that the carbon division in 1957 will be in a better position to increase production and sales, Mr. Hillman said.

Cokeoven Contract Awarded by Kaiser

Kaiser Steel Corporation has awarded Koppers Company, Pittsburgh, Pa., a contract to design and build two new cokeoven batteries and to make extensions to the coal chemical plant at the steel corporation's Fontana, Calif., operations.

Each battery will consist of forty-five Koppers-Becker gas gun-type ovens. When completed, the plant will have a total of seven batteries, each consisting of forty-five ovens.

Chemical Raw Materials Featured at World Trade Fair

Scientific apparatus, ores, fertilizers, and finished goods of interest to the chemical industry are on display at the United States World Trade Fair, being held until next Saturday at the Coliseum, New York.

The fair is the largest international trade exposition to be held in the Western Hemisphere. It features national pavilions and exhibits from fifty-nine countries and 3,000 commercial exhibitors from all over the world.

A key feature of the Brazilian exhibit is a display of oiticica oils and resins, castor beans and oil, ouricury waxes and oils, carnauba waxes, cocoa beans, and other vegetable raw materials.

Included among the ores displayed by that nation are magnesium carbonate, talc, malachite, hematite, and various grades of wolframite and scheelite.

The Brazilian Institute of Sugar and Alcohol sponsors a display of absolute alcohol, and sugars in various forms and stages of refinement. Finished rubber and plastic goods are also on display.

A Japanese exhibit features various industrial forms of carbon and graphite for metallurgical, electrochemical, chemical and atomic energy uses.

Included among the carbon and graphite implements are graphite anodes, impervious carbon valves, reactor graphite and graphite crucibles for various applications. The exhibit is sponsored by Mitsubishi Shoji Kaisha, Ltd.

Another exhibit, also from Japan, displays precision scientific instruments, including electron microscopes, sponsored by Hitachi, Ltd., of Tokyo.

The Liberian exhibit features a display

—*Continued on page 48*

TRIBUTYL PHOSPHATE

outstanding anti-foam agent

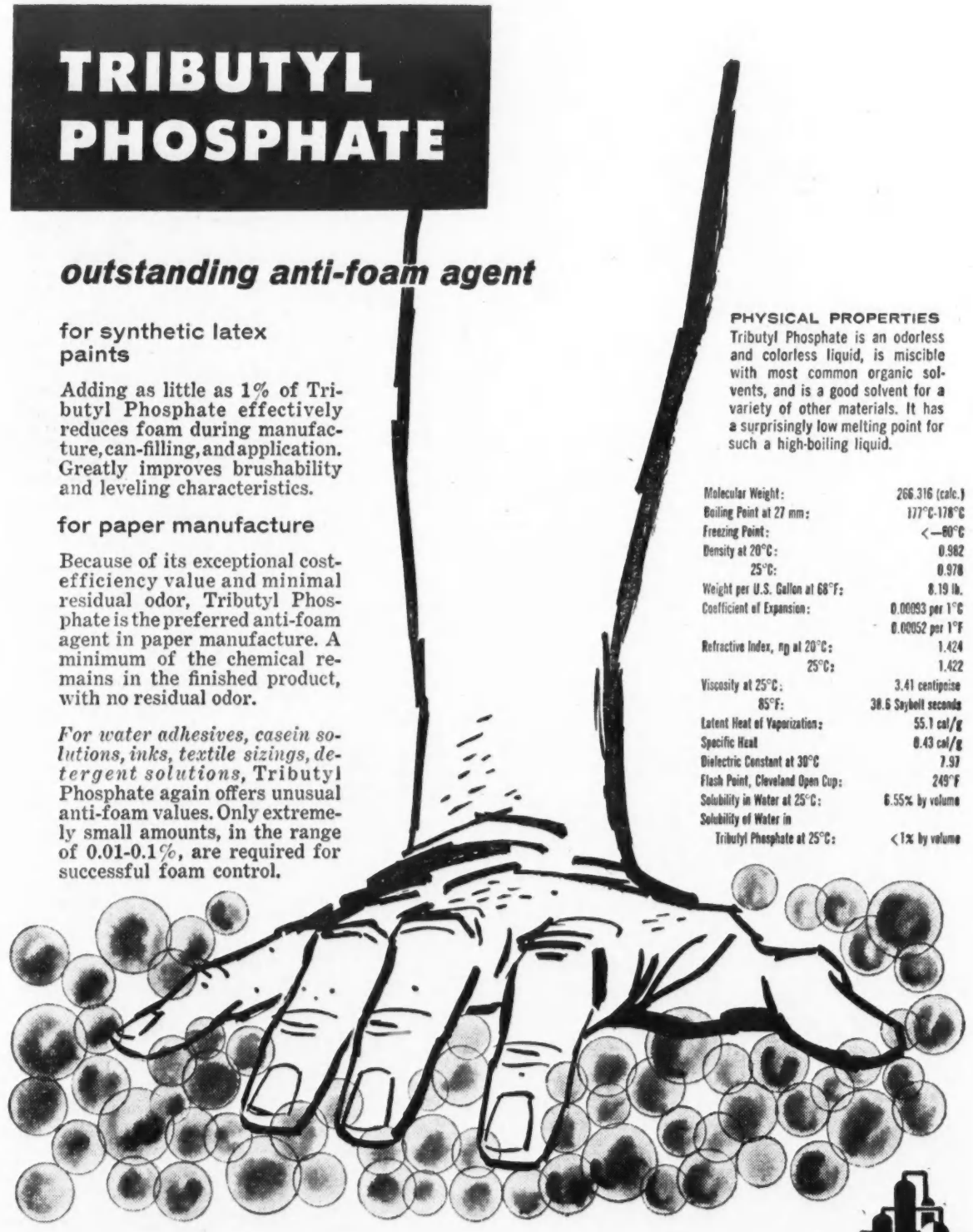
for synthetic latex paints

Adding as little as 1% of Tributyl Phosphate effectively reduces foam during manufacture, can-filling, and application. Greatly improves brushability and leveling characteristics.

for paper manufacture

Because of its exceptional cost-efficiency value and minimal residual odor, Tributyl Phosphate is the preferred anti-foam agent in paper manufacture. A minimum of the chemical remains in the finished product, with no residual odor.

For water adhesives, casein solutions, inks, textile sizings, detergent solutions, Tributyl Phosphate again offers unusual anti-foam values. Only extremely small amounts, in the range of 0.01-0.1%, are required for successful foam control.



PHYSICAL PROPERTIES

Tributyl Phosphate is an odorless and colorless liquid, is miscible with most common organic solvents, and is a good solvent for a variety of other materials. It has a surprisingly low melting point for such a high-boiling liquid.

Molecular Weight:	266.316 (calc.)
Boiling Point at 27 mm:	177°C-178°C
Freezing Point:	<—60°C
Density at 20°C:	0.982
25°C:	0.978
Weight per U.S. Gallon at 68°F:	8.19 lb.
Coefficient of Expansion:	0.00093 per 1°C
	0.00052 per 1°F
Refractive Index, n_D at 20°C:	1.424
25°C:	1.422
Viscosity at 25°C:	3.41 centipoise
85°F:	38.6 Saybolt seconds
Latent Heat of Vaporization:	55.1 cal/g
Specific Heat	0.43 cal/g
Dielectric Constant at 30°C	7.97
Flash Point, Cleveland Open Cup:	249°F
Solubility in Water at 25°C:	0.55% by volume
Solubility of Water in Tributyl Phosphate at 25°C:	<1% by volume

INDUSTRIAL CHEMICALS DEPARTMENT

COMMERCIAL SOLVENTS CORPORATION

260 MADISON AVE., NEW YORK 16, N. Y.

Boston • Chicago • Cincinnati • Cleveland • Detroit • Houston • Indianapolis • Kansas City • Los Angeles
Louisville • Memphis • Milwaukee • New Orleans • New York • Pittsburgh • St. Louis • San Francisco

IN CANADA: Reliance Chemicals, Ltd., Montreal. IN MEXICO: Comsolmex, S. A., Mexico 11, D. F.

Association Meetings

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Zinc Institute, annual meeting, Drake hotel, Chicago, April 25-26.

Association of Consulting Chemists and Chemical Engineers, banquet and symposium, Belmont Plaza hotel, New York, April 24.

Industrial Health Conference, Kiel Auditorium, St. Louis, Mo., April 22-26.

Lead Industries Association, annual meeting, Drake hotel, Chicago, April 24-25.

National Industrial Research Conference, sponsored by Armour Research Foundation, Conrad Hilton hotel, Chicago, April 24-25.

Scientific Apparatus Makers Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., April 27-May 2.

American Coke and Coal Chemicals Institute, regional meeting, Westchester Country Club, Rye, N. Y., May 13-14.

American Institute of Chemists, annual meeting, Sheraton-Mayflower hotel, Akron, Ohio, May 22-24

American Oil Chemists' Society, annual meeting, Roosevelt hotel, New Orleans, La., April 28-May 1.

American Pharmaceutical Association, Statler hotel, New York, April 28-May 3.

American Pharmaceutical Manufacturers' Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., May 27-29.

Association of Consulting Chemists & Chemical Engineers, annual meeting, Belmont-Plaza hotel, New York, October 22.

Chemical Market Research Association, annual meeting, Plaza hotel, New York, May 27-28; Lake Placid, N. Y., September 16-17.

Chemical Specialties Manufacturers Association, midyear meeting, Drake hotel, Chicago, May 20-22

Commercial Chemical Development Association, resort meeting, French Lick, Ind., May 13-14.

Drug, Chemical and Allied Trades section of New York Board of Trade, annual meeting, Galen Hall, Wernersville, Pa., September 19-21.

Electrochemical Society, Statler hotel, Washington, D. C., May 12-16.

Federation of Paint and Varnish Production Clubs, annual convention, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Manufacturing Chemists Association, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 6-8.

National Paint, Varnish and Lacquer Association, annual convention, Sheraton-Park and Shoreham hotels, Washington, D. C., November 4-6.

National Plant Food Institute, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-12.

Paint Industries Show, sponsored by Federation of Paint and Varnish Production Clubs, Bellevue-Stratford hotel, Philadelphia, October 30-November 2.

Proprietary Association, annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., May 12-15.

Salesmen's Association of the American Chemical Industry, annual sales clinic, Roosevelt hotel, New York, October 14.

Society of Cosmetic Chemists, annual meeting, Commodore hotel, New York, May 10.

Society of Flavor Chemists, luncheon and flavor symposium, Roosevelt hotel, New York, May 22.

Synthetic Organic Chemical Manufacturers Association, annual outing Skytop Lodge, Skytop, Pa., May 27-29.

Toilet Goods Association, annual convention, Waldorf-Astoria hotel, New York, May 7-9.

Chemical Firms Follow Trend Of Granting Day-After Holidays

Over one-third of the drug and chemical firms which have considered special arrangements for time-off on the Friday (May 31) following Memorial Day will be closed all day; while for the Friday (July 5) following Independence Day nearly one-half will remain closed. This information was disclosed in an announcement released last week by the Drug, Chemical and Allied Trades Section of the New York Board of Trade as the result of a survey of its membership.

Of the 285 firms responding, 71.9 percent had not considered the question of time-off on the days following the holidays.

Those which replied in the affirmative for Friday, May 31, reported: Closed all day—36.3 percent; skeleton staff or closing early—15 percent; plant only closed—2.5 percent. It was also reported that 23.7 percent state they will be open all day and 22.5 percent have not as yet made their decision.

The returns for Friday, July 5, show: Closed all day—47.5 percent; skeleton staff or closing early—15 percent; plant only closed—3.7 percent. It was added that 12.5 percent will remain open all day, while 21.3 percent are still undecided.

Davison Is Building Catalyst Unit in Ohio

Davison Chemical Company Division of W. R. Grace & Co. will start commercial scale production this year of polyolefin catalyst, under license from Phillips Petroleum Company, at a new plant under construction at Cincinnati, Ohio, adjacent to the company's large petroleum cracking catalyst plant at that location.

Pilot plant quantities of the polyolefin catalyst have hitherto been in production. The plant will produce catalyst to supply licensees of the Phillips polyolefin process.

Pharmaceutical Ass'n Plans Record Meeting

The American Pharmaceutical Association expects to hang up a record for attendance at this year's 104th annual meeting, to be held in the Statler hotel, New York, April 28 through May 3.

Dr. Robert F. Fischelis, secretary, said that present indications are that the convention will be the largest in the association's history.

Six affiliated organizations representing specialized segments of the pharmacy profession will meet concurrently. These include the American Association of Colleges of Pharmacy, the American College of Apothecaries, the American Institute of the History of Pharmacy, the American Society of Hospital Pharmacists, the National Association of Boards of Pharmacy, and the National Conference of State Pharmaceutical Secretaries.

In addition to the programs on pharmaceutical education, retail and hospital practice, history, licensure and state pharmaceutical activities, it is expected that

—Continued on page 67

Cotton Group to Hear Secretary of Agriculture

Secretary of Agriculture Ezra Taft Benson will be a featured speaker at the sixty-first annual convention of the National Cottonseed Products Association, to be held at the Shoreham hotel, Washington, D. C., May 20 and 21. Mr. Benson will speak at the session on Tuesday morning, May 21.

In the light of the major changes occurring in the cotton industry—especially the operation of the Soil Bank—Mr. Benson's appearance is expected to be of particular interest to members of the cottonseed crushing industry.

Synthetic Narcotic Legislation Seen Getting Through Congress In Revised Form This Year

The revised version of the Karsten bill for federal regulation over the production and marketing of synthetic narcotics has been presented to the house. The bill (H. R. 6895) conforms closely to agreement between the interested drug producers and the Bureau of Narcotics and no difficulties are expected to be encountered in getting it through congress this year. Sponsored by Rep. Frank M. Karsten of Missouri, the bill would prohibit the manufacture of synthetic narcotics in this country except by persons licensed by the Commissioner of Narcotics, and then in amounts fixed by quotas based on market needs. It also implements the international conventions on narcotics.

Rep. Karsten said that need for control legislation in the synthetic narcotics field is urgent. A practical control over the manufacture of natural narcotics, which can be manufactured only from crude opium and coca leaves not grown in the United States, has been achieved in the past by limiting the amounts of importation of crude opium and coca leaves, he said, but no such control is available over the manufacture of synthetic drugs that can be produced from available domestic sources.

Role of Harrison Act

"The Harrison Act has been generally effective to control the distribution and use of narcotic drugs in interstate commerce," he explained. "But with the development of the new synthetic drugs control over distribution and use without control of the manufacturing source is no longer adequate. An effective system of control requires, among other measures, restriction of the total production of all narcotic drugs to the amount required for medicinal and other proper uses. Any excess tends to find its way into illicit traffic and use, dispite controls on distribution and sale.

"The new legislation is needed not only for general health and welfare purposes; it is also required to enable the United States government to discharge its treaty obligations which require it to limit the manufacture in the United States of new synthetic narcotic drugs, as well as the natural narcotic drugs, to quantities required for legitimate medical and scientific needs and to manufacturers who have been licensed for the purpose."

Pressure for passage of more extensive control legislation in this field has devel-

—Continued on page 53

DCAT Nominations Post Goes to Sydney Stokes

Sydney N. Stokes, of van Ameringen-Haebler, Inc., New York, has been appointed chairman of the nominating committee of the Drug, Chemical and Allied Trades Section of the New York Board of Trade.

Other members appointed were: Stanley I. Clark, of Sterling Drug, Inc.; Charles M. Macauley, of Charles M. Macauley & Associates; Leon W. Miller, of Barrett Division, Allied Chemical & Dye Corporation; and Lloyd I. Volckening, of Ivers-Lee Company.

The committee will nominate members for the executive committee to be elected at the section's annual meeting at Galen Hall, Wernersville, Pa., September 19 through 21.

Color Association Elects

Samuel G. Baker, general manager of the organic chemicals department of E. I. duPont de Nemours & Co., Wilmington, Del., has been elected a director of the Color Association of the United States at its forty-second annual membership meeting, held at the offices of the organization in New York.

Howard S. Bunn

Carbide Will Spend $170 Million in 1957

Union Carbide & Carbon Corporation expects to spend $170 million this year to keep its productive capacity abreast of the nation's economy. Howard S. Bunn, executive vice-president of the New York firm, told stockholders last week that in 1956, Carbide spent $145 million on construction.

Among several major additions to production facilities now under way are two expansion programs at the Texas City, Tex., chemicals plant. One will add 50 million pounds a year to capacity for the production of vinyl acetate. The unit is scheduled for completion this spring. The second is an expansion of oxo chemicals facilities scheduled for completion during the latter half of this year. The principal products this unit will produce are butyraldehyde, used to manufacture solvents and plasticizer, intermediates; amyl alcohols, used for flotation agents; and isodecanol, used for synthesis of plasticizers.

Two expansion programs adding 55 million pounds a year to capacity for produc-

—Continued on page 49

Coke and Coal Institute Will Meet in Rye, N. Y.

The American Coke and Coal Chemicals Institute will hold its regional meeting at the Westchester Country Club, Rye, N. Y., May 13 and 14. H. J. Weiland of Ketona Chemical Corporation, will speak on anhydrous ammonia from coke oven gas.

Other speakers will include: Dr. James N. Roche, of Koppers Company, "Expanding Horizons for Creosote," B. P. Mulcahy, president of Fuel Research Laboratory, Inc., Indianapolis, Ind., "Coal and Coke Testing, Why," and J. A. DeCarlo, chief of the coke section of the branch of coal economies and statistics of the Bureau of Mines, "Trends and Uses of Coke Products."

Herbicide Development Seen as Boon to Legumes

Underseeded legumes on millions of acres of small grains may get off to a healthier start in the future with the help of two new selective herbicides recently tested by weed-control specialists of the Department of Agriculture.

The two newcomers are 4(2,4-DB) and 4(MCPB). Both have demonstrated—in limited 1955 tests and in more extensive experiments during 1956—that they could become valuable supplements to herbicides farmers are now using, the department says.

In experiments last year at USDA's Agricultural Research Center, Beltsville, Md., and in cooperative field tests at agricultural experiment stations in several states, the new weed-killing compounds proved safe to use for weed control in seedling legumes and certain other crops.

Research indicates the two herbicides show most promise as post-emergence or foliage treatments. However, the 1956 tests indicate they may be effective also for pre-emergence weed control.

This year farmers in more than sixteen states will underseed an estimated 36 million acres of small grains (wheat, oats, barley, rye) with such legumes as alfalfa, various clovers, annual lespedezas, and others.

USDA researchers point out that development of safe and effective chemical weed killers, for use in small grains, that would protect underseeded legumes in the seedling stage from destructive weed competition, could more than double the acreage of small grains now treated with chemicals for selective weed control.

Results of the Beltsville tests show that both 4(2,4-DB) and 4(MCPB) gave excel-

—Continued on page 55

The Satisfied Consumer

CANDIDATE FOR PYRILAMINE MALEATE

Pyrilamine answers important needs for antihistamine therapy because of outstanding effectiveness and compatibility with a variety of other pharmaceuticals.

"SURE IT'S GOOD—THOUSANDS USE IT"

Pyrilamine is the most favored antihistamine, employed in more formulations and by more manufacturers than any other antihistamine today.

ROAD TO RECOVERY

Pyrilamine is a superior antihistamine. It is remarkably well tolerated, the occurrence of drowsiness in particular being notably low.

THE SATISFIED CONSUMER

And you, too, will be satisfied with Pyrilamine, whether formulated in cold tablets, cough syrups, nasal preparations, ointments, lotions or creams. Check your Merck representative for the details.

PYRILAMINE MALEATE MERCK

builds acceptance for antihistamine formulations

MERCK & CO., INC. • Chemical Division • RAHWAY, NEW JERSEY

© Merck & Co., Inc.

CHEMICALS AND RELATED MATERIALS

All matters under this heading fully protected by copyright.

Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, April 19 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns. lb. 4.25 - 5.00
Abietic acid, coml., dms., c.l., works lb. .12 - —
dms., l.c.l., ex whse lb. .1490- —
Cryst., dms., c.l., works lb. .06½- —
dms., l.c.l., works lb. .07 - .07½
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls., dms., lb. .41 - .50
Acetaldehyde, 99%, dms., c.l., works, lb. .12 - —
dms., l.c.l., works lb. .13½- —
tanks, works lb. .10 - —
Acetaldol (see Aldol).
Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld. lb. .30½- —
bbls., bgs., ton lots, frt. alld. lb. .31½- —
bbls., bgs., smaller lots, frt. alld. lb. .34½- —
USP, bbls., 2,000-lb. lots lb. .79 - —
bbls., smaller lots lb. .80 - .81
Acetic acid, coml. or redist, 28%, bbls. 100 lbs. 4.80 - —
56%, bbls. 100 lbs. 8.25 - —
70%, bbls. 100 lbs. 9.95 - —
80%, bbls. 100 lbs. 10.45 - —
Acetic acid, glacial, syn., CP, dms., dlvd. 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. 100 lbs. 13.75 - —
dms., l.c.l., dlvd. 100 lbs. 14.25 - —
tanks, dlvd. 100 lbs. 10.00 - —
USP, cbys., incl., dlvd. 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E. lb. .15½- —
aluminum ret. dms., l.c.l., dlvd. E. lb. .17 - —
tanks, dlvd. E. lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd. lb. .80 - —
fib. dms., l.c.l. dlvd. lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd. lb. 1.35 - —
fib. dms., l.c.l., dlvd. lb. 1.36 - —
Acetoacet-o-toluidide, fib. dms., c.l., dlvd. lb. .82 - —
fib. dms., l.c.l., dlvd. lb. .83 - —
Acetone, CP, dms., c.l., dlvd. lb. .10½- —
dms., l.c.l., dlvd. lb. .11½- —
tanks, dlvd. lb. .06 - —
Acetonitrile, dms., c.l., works lb. .45 - —
dms., l.c.l., works lb. .47 - —
Acetophenetidin, USP, bbls., works, frt. equald lb. 1.22 - 1.24
Acetophenone, cns., dms. lb. 1.21 - 1.85
Tech., dms., l.c.l., works lb. .75 - —
N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85
Acetylene black, imp., bgs., c.l., duty and freight extra lb. .19 - —
cs., l.c.l., ex whse lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distrib., bbls., 1,000-lb. lots, point of shipt lb. .63 - —
USP, standard, fine, cryst. gran., (30-40 mesh) powd., (80 mesh), bbls., 1,000-lb. lots, same basis lb. .58 - —
Freight equald, shipt identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .36 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .35 - —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40 - —
tanks, frt. alld. E. of Denver lb. .37 - —
Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt. alld lb. .60 - —

Acids

Acid quotations, formerly grouped under one heading, are now listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
dms., l.c.l., works lb. .47½- —
tanks, works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .30 - —
dms., l.c.l., t.l.l., frt. equald lb. .31 - —
tanks, frt. equald lb. .27 - —
ACTH, cryst., bulk, 1,000 units gram, bots. gram 15.00 - —
Adeps lanae (see Lanolin).

Abies Siberica Oil—Ammonium Benzoate

Adipic acid, bgs., c.l., dlvd. lb. .32 - —
bgs., l.c.l., dlvd. lb. .34¾- —
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 2.00 - —
powd., 30 mesh., fib., dms. lb. 2.50 - —
dl-Alanine, dms., works lb. 8.50 -11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms. lb. .65 - .85
Egg, edible, cryst., powd., bbls. lb. 1.32 - 1.34
flake lb. 1.28 - 1.30
tech., cryst., bbls. lb. 1.08 - 1.10

Alcohols

Alcohol quotations, formerly grouped under one heading, are now listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aldol, 95%, dms., works lb. .23 - —
Denaturing grade, dms. gal. 2.15 - —
Aldrin, tech., fib. dms., c.l., t.l., dlvd. lb. .90 - —
fib. dms., l.c.l., dlvd. lb. .95 - 1.05
Aletris root, bgs. lb. 1.75 - 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., dlvd. N. of Tenn. and N.C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. 2.25 - —
Alkali blue toner, litho flushed, 125-lb. bbls., same basis. lb. 1.28 - —
Alkali blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N.C., S.C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Allethrin, 90%, dms., frt. alld. lb. 28.80 -28.90
Soln., 20%, dms., 200-2,000 lb. lots, frt. alld. lb. 6.50 - 6.55
2½%, dms., frt. alld. lb. .93 - 1.10

Abbreviations

Used in OPD Market Quotations

alld.	allowed
amorph.	amorphous
AMP	American melting point
anhyd.	anhydrous
a.p.a.	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist.	destructively—distilled
dl-	dextrolaevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E.	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
i.&a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p.	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S. E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l., dlvd. lb. .32½- —
dms., l.c.l., dlvd. lb. .33½- —
tanks, dlvd. lb. .30 - —
Allyl bromide, 55-lb. cbys., 5,005 lbs. or more, works lb. 1.47 - —
55-lb. cbys., 1,045 to 4,950 lbs., works lb. 1.52 - —
55-lb. cbys., 55 to 990 lbs., works. lb. 1.57 - —
Allyl chloride, dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .15 - —
Almond oil, artif., bitter (see Benzaldehyde).
Almond oil, nat., bitter, f.p.a., bots. lb. 3.00 - 3.75
NF, bots. lb. 3.25 - 3.75
USP, sweet, cns., dms. lb. 1.45 - 1.50
Aloe, Cape, cs. lb. .50 - —
powd., cs. lb. .65 - —
Curacao, kgs. lb. .60 - —
Aloin, USP, bbls., dms., kgs. lb. 3.50 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphaapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
USP, burnt, dms. lb. .20 - .21
hydrous, dms. lb. .07¾- .08
Alum, potassium, gran., bgs., works, 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt, dms lb. .20 - .21
hydrous, dms lb. .07¾- .08
Alum, potash-chrome, dms lb. .17 - —
Alumina, calcined, bgs., c.l., works, lb. .0453- —
bgs., l.c.l., works lb. .048 - .075
Aluminum acetate, basic soln., 24%, bbls., l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works, frt. equald. lb. .16½- —
cryst., dms., c.l., works 100 lbs. 16.00 - —
dms., l.c.l., works 100 lbs. 16.50 - —
soln. 32°, cbys., c.l., works lb. .0445- —
cbys., l.c.l., works lb. .0520- .1290
tanks, works 100 lbs. 3.45 - —
NF, gran., dms., works lb. .29 - .30
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .16¾- —
bgs., l.c.l., works lb. .17¾- .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Aluminum formate, basic soln., dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .12½- —
Aluminum hydrate, heavy, bgs., c.l., frt. equald lb. .032 - —
bgs., 20,000-40,000 lb. lots, same basis lb. .0345- —
bgs., 2,000-20,000 lb. lots, same basis lb. .0443- —
bulk, same basis lb. .0295- —
Aluminum hydroxide, dried, USP XV, fib. dms. works lb. .82½- —
fib. dms., contract, works lb. .79½- —
Gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
fib. dms., contract works lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
fib. dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+, ingots, 10,000-lb. lots, frt. alld. lb. .2710- —
pigs, 10,000-lb. lots, frt. alld. lb. .2500- —
Aluminum oxide, amorphous (see Alumina, calcined).
Aluminum paste, lining, extra-fine, dms lb. .68 - —
Standard grade, dms lb. .48 - —
Aluminum powder, lining, extra-fine, dms lb. 1.09 - —
Standard grade, dms lb. .78½- —

Aluminum paste and powder prices are f.o.b. shipping point. Add 1c. per lb. for 100-lb. dm., 1½c. per lb. for 50-lb. dm., 3c. per lb. for 10 lb. can and 5c. to 12c. per lb. for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Aluminum resinate, precip., 2.1% Al, dms lb. .33 - —
Aluminum stearate, dibasic, ctns., c.l. lb. .39 - —
ctns., l.c.l lb. .40 - .44
Monobasic, ctns., c.l lb. .39 - —
ctns., l.c.l lb. .40 - .44
Tribasic, ctns., c.l lb. .39 - —
ctns., l.c.l lb. .40 - .44
Aluminum sulfate, coml., bulk, c.l., works 100 lbs. 1.85 - —
grd., bgs., c.l., works ton 37.00 - —
lump, bgs., c.l., works ton 40.00 - —
Iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.55 - —
bgs., l.c.l., works, frt. equald. 100 lbs. 3.95 - 4.50
USP, gran., dms., works lb. .29 - .30
powd., dms., works lb. .36 - .37
Aluminum sulfate prices $1 per ton higher in the South.
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots. oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld. lb. 1.57 - —
Aminoacetic acid, NF, bbls., frt. adjusted lb. 1.50 - 1.75
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.74 - 1.77
USP, dms., 1,000-lb. lots or more, works lb. 2.60 - —
dms., smaller lots, works lb. 2.65 - 2.75
Aminoethyl ethanolamine, dms., c.l., dlvd. lb. .475 - —
dms., l.c.l., dlvd. lb. .483 - —
tanks, dlvd. lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld. lb. .44 - —
dms., l.c.l., frt. alld. lb. .45 - —
tanks, frt. alld lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. lb. 2.50 - —
p-Aminophenol, dms., frt. alld lb. 1.15 - —
Aminophylline, USP, 100-lb. dms lb. 3.55 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.70 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton 80.00 - —
refrigeration tanks works, frt. equald ton 82.50 - —
Aqueous, tanks, works, anhyd. basis ton 83.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald. 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 9.25 - —
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .41 - —
Ammonium benzoate, USP, dms., kgs., 4,000-lb. lots, frt. alld lb. .80 - —
dms., kgs., smaller lots, frt. alld. lb. .81 - 1.00

Ammonium Biborate—Avacado Oil

Ammonium biborate, gran., dms., c.l., works ..... ton. 319.50 • —
dms., ton lots, ex whse .. ton. 397.00 • —
dms., smaller lots, ex whse ton. 402.00 • —
Ammonium bicarbonate, dom., dms., c.l., works .. 100 lbs. 7.00 • —
dms., l.c.l., works ..... 100 lbs. 9.00 • —
Ammonium bichromate, dms., works. lb. .42 • .43
Ammonium bifluoride, dms., dlvd lb. .2145- .2245
Ammonium bromide, NF, gran., bbls. lb. .45 • —
Powdered ammonium bromide 10c. per lb. higher.
Ammonium carbonate, USP, lump, dms. .lb. .15½- —
Ammonium chloride, tech., fine gran., bgs., c.l., works .. 100 lbs. 5.75 • —
l.c.l., works ..... 100 lbs. 7.75 • 8.20
USP, gran., fib. dms ..... lb. .17¼- —
Ammonium citrate, dibasic, bbls .. lb. .77 • —
Ammonium dichromate (see Ammonium bichromate).
Ammonium fluoride (see Ammonium bifluoride).
Ammonium hydroxide (see Ammonia acqueous).
Ammonium hypophosphate NF, dms. lb. 3.07 • —
Ammonium iodide, NF, dms., bots. lb. 4.26 • 4.38
Ammonium linoleate, 80%, dms., works .. lb. .50 • .55
Ammonium molybdate, CP, cryst., bbls., 15,000 lbs., works .. lb. 1.22 • —
bbls., 2,000-lb. contracts, works. lb. 1.23 • —
ringle bbls., works ..... lb. 1.24 • —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., western works, frt. equald, base price .. ton. 64.00 • —
USP, gran., bbls., dms. ..... lb. .17¼- —
Ammonium nitrate, imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 ton base price .. ton. 64.00 • —
August discount ..... ton. 5.00 • —
western, bgs., c.l., f.o.b. cars, Los Angeles .. ton. 79.69 • —
with dolomite, 20.5% N, bgs., Hopewell, Va .. ton. 51.00 • —
Ammonium oxalate, fine gran., dms. lb. .26½- .31
Ammonium pentaborate, gran., bgs., c.l., works .. ton. 187.50 • —
bgs., ton lots, ex whse ..... ton. 273.50 • —
bgs., smaller lots, ex whse .. ton. 278.50 • —
Ammonium pentaborate powder $10 per ton higher.
Ammonium Persulfate, tech., dms., 10-ton lots or more, works. lb. .18 • —
dms., smaller lots, works .... lb. .20 • .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald .. lb. .09¼- —
bgs., l.c.l., same basis ..... lb. .10 • —
Dibasic, NF, V bbls., dms .... lb. .46 • —
Tech, bgs., c.l., works, frt. equald. lb. .09¼- —
bgs., l.c.l., same basis ..... lb. .10 • —
Ammonium silicofluoride, dms., works .. lb. .11¾- .13¼
Ammonium sulfamate, bgs., c.l., t.l., works .. lb. .19 • —
bgs., l.c.l., works ..... lb. .20½- —
Ammonium sulfate, coke-oven, bulk, producing ovens, base price .. ton. 32.00 • —
purif., dms., works ..... lb. .10 • .10½
syn., bulk, c.l., works ..... ton. 32.00 -42.00
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis .. ton. 160.00 • —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., dms., c.l., works .. lb. .20 • —
dms., l.c.l., works ..... lb. .22 • .26
Ammonium thioglycollate, coml., cbys., 100% basis ..... lb. 1.35 • 1.65
Highly purif., cbys., 100% basis. lb. 1.70 • 1.96
Ammonium thiosulfate, cryst., photo grade, fib. dms., frt. alld .. lb. .65 • —
d-Amphetamine hydrochloride, di-basic bots .. lb. 18.00 -28.00
dl-Amphetamine hydrochloride, di-basic, bots .. lb. 4.50 • 6.00
d-Amphetamine hydrochloride, mono-basic., bots .. lb. 18.00 -28.00
dl-Amphetamine phosphate, bots .. lb. 4.50 • 6.00
d-Amphetamine phosphate, fib. dms. lb. 18.00 -28.00
d-Amphetamine sulfate, fib. dms. lb. 18.00 -28.00
dl-Amphetamine sulfate, fib. dms., lb. 4.50 • 6.00
Amyl acetate, ex fusel oil, tech., dist, from 125° to 150°C., dms., c.l., frt. alld. E. of Rockies .. lb. .18½- —
dms., l.c.l., same basis .... lb. .19½- —
tanks, same basis ..... lb. .16 • —
Ex pentane, reg. dms., c.l., dlvd. lb. .18½- —
dms., l.c.l., dlvd ..... lb. .19½- —
tanks, dlvd. ..... lb. .16 • —

Amyl acetate, syn., oxo process, dms., c.l., dlvd .. lb. .20¼- —
dms., l.c.l., dlvd ..... lb. .21¼- —
tanks, dlvd. ..... lb. .17¾- —
Tech., dms., c.l., dlvd ..... lb. .16½- —
dms., l.c.l., dlvd ..... lb. .17½- —
tanks, dlvd. ..... lb. .14 • —
Amyl alcohol, ex fusel oil (see Fusel oil, refd.),
Amyl alcohol, ferment., refd., 128°-132°C., dms., l.c.l., dlvd .. lb. .43 • —
refd., ACS grade, dms., l.c.l., dlvd .. lb. .45 • —
Ex-pentane, mixed amyls, dms., c.l., frt, alld .. lb. .18½- —
dms., l.c.l., frt. alld ..... lb. .19½- —
tanks, frt. alld ..... lb. .16 • —
primary, dms., c.l., frt. alld. lb. .19¾- —
dms., l.c.l., frt. alld ..... lb. .20¾- —
tanks, frt. alld ..... lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld .. lb. .19 • —
dms., l.c.l., works ..... lb. .20 • —
tanks, works ..... lb. .17 • —
tert-synthetic, dms., c.l., frt. alld. E .. lb. .18½- —
dms., l.c.l., frt. alld E ..... lb. .19½- —
tanks, frt. alld. E ..... lb. .16 • —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works .. lb. .41½- —
dms., l.c.l., works ..... lb. .42½- —
tanks, works ..... lb. .39½- —
2-Pentanol, dms., c.l., works .... lb. .65 • —
dms., l.c.l., works ..... lb. .70 • —
tanks, works ..... lb. .60 • —
Amyl cinnamic aldehyde, dms .. lb. 1.70 • 2.20
Amyl salicylate, cns., dms ..... lb. .82 • 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½- —
dms., l.c.l., works ..... lb. .50½- —
tanks, works ..... lb. .47 • —
p-tert-Amyl phenol, dms., c.l. works. lb. .26¾- —
dms., l.c.l., works ..... lb. .27¾- —
tanks, works ..... lb. .25¾- —
Amyl n-butyrate, dms ..... lb. 1.00 • 1.25
Amyris oil, dms ..... lb. 1.25 • —
Anethole, cns., dms ..... lb. 1.60 • 1.80
Tech., dms ..... lb. 1.10 • 1.15
Angelica root, dom., bls ..... lb. .80 • .90
Angelica root oil, bots ..... lb. 85.00 -100.00
Angelica seed oil, bots ..... lb. 80.00 -95.00
Aniline, dms., c.l., frt. alld ..... lb. .22 • —
dms., l.c.l., frt. alld ..... lb. .23 • —
tanks, frt. alld ..... lb. .20 • —
tankwagons, min. 2,000 gals .... lb. .20½- —
Aniline oil (see Aniline).
Aniline salt, dms., c.l., truckloads, 20,000 lbs. min., frt. alld. lb. .33 • —
dms., l.c.l., same basis ..... lb. .35 • —
Anise oil, USP, dms ..... lb. 2.75 • 3.50
Anise seeds, Mexican, bgs ..... lb. .25 • —
Spanish, bgs ..... lb. .25 • —
Syrian, bgs ..... lb. .25 • —
Anisic aldehyde, bots., dms ..... lb. 1.95 • 2.70
o-Anisidine, dms., c.l., frt. alld .. lb. .80 • —
dms., l.c.l., same basis ..... lb. .82 • —
tanks, same basis ..... lb. .78 • —
p-Anisidine, dms., works ..... lb. .97 • —
Annatto seed, whole, bgs. .... lb. .15 • .17
Anthracene, 90-95%, bbls., ton-lots, works .. lb. .83 • —
bbls., smaller lots, works .... lb. .95 • —
Anthranilic acid, 99%, 150-lb. dms., dlvd .. lb. 1.15 • —
Anthraquinone, 99.5%, bbls., c.l., frt. alld .. lb. .83 • —
bbls., l.c.l., same basis ..... lb. .86 • —
Electrical grade, bbls., l.c.l., same basis .. lb. .91 • —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines . lb. .33 • —
cs., c.l., mines ..... lb. .33½- —
Antimony oxide, bgs., c.l., frt. alld. lb. .27 • —
bgs., l.c.l., frt. alld. ..... lb. .28½- —
Antimony sulfide, approx. 65%, bgs., dlvd .. lb. .23 • .26
Antimony trichloride, anhyd., solid, pails, c.l., works .. lb. .41 • —
pails, l.c.l., works ..... lb. .43 • —
Antimony-potassium tartrate, tech., powd., dms .. lb. .69½- .74⅛
USP, powd., dms. ..... lb. .74½- .75⅛
Antipyrine, NF, 200-lb. bbls. .... lb. 3.50 • —
Apomorphine hydrochloride USP 25-oz. lots .. oz. 35.60 • —
Apricot kernel oil USP, dms .... lb. .75 • .90
Arabic gum, amber, sorts, bgs. .. lb. .21 • .23
USP, powd., bbls. ..... lb. .27 • .29
Areca nuts, powd., bbls. ..... lb. .13 • —
Arecoline hydrobromide, NF, bots., tins .. oz. 4.50 • 6.00
l-Arginine monohydrochloride, dms., 1 kilo lots .. kilo. 74.80 • —
Arnica flowers (true Montana), bls. lb. 2.25 • —
Arsenic, crude (95%), bulk, c.l., works .. lb. .016 • —
bbls., c.l., works ..... lb. .031 • —
Arsenic trioxide, USP, dms. .... lb. .48 • —
Arsenic, white, powd., bbls., c.l., works .. lb. .04½- —
bbls., l.c.l., works ..... lb. .06½- .07⅛
Arsenous acid, tech (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 • —
Light shades, bbls ..... lb. 2.85 • —
Maroon shade, bbls ..... lb. 3.70 • —
Asafetida, cn ..... lb. .40 • —
Powd., bbls., dms ..... lb. .85 • —
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude,
6D, c.l. (30 tons), mines .. ton. 82.00 • —
7D, c.l. (30 tons), mines .. ton. 72.00 • —
7F, c.l. (30 tons), mines .. ton. 68.25 • —
7H, c.l. (30 tons), mines .. ton. 58.00 • —
7K, c.l. (30 tons), mines .. ton. 48.30 • —
7M, c.l. (30 tons), mines .. ton. 42.00 • —
7R, c.l. (30 tons), mines .. ton. 41.00 • —
7RF, c.l. (30 tons), mines. ton. 42.00 • —
7T, c.l. (30 tons), mines .. ton. 39.00 • —
7TF, c.l. (30 tons), mines. ton. 42.00 • —
Asbestos prices are in US funds; l.c.l. lots $4 per ton higher.
Ascorbic acid, USP, dms., 25-100 kilo lots .. kilo. 12.00 • —
dms., 10-kilo lots ..... kilo. 12.35 • —
dms., 5-kilo lots ..... kilo. 12.75 • —
bots., 1-kilo lots ..... kilo. 13.00 • —
bots, 500-gram lots ..... kilo. 13.50 • —
Ash black (see Barium sulfide).
Asphalt gilsonite, black jet, bgs., c.l., mines .. ton. 40.00 • —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines .. ton. 35.00 • —
select, 350° F. fusing pt., bgs., c.l., mines .. ton. 41.00 • —
270°-295° F. fusing pt., bgs. c.l., mines .. ton. 40.00 • —
Manjac, No. 10, crude, dms., works .. lb. .06¼- —
Petroleum, cut-back, tanks, tank-wagon, refy .. gal. .09 • —
emulsion, tanks, tankwagon, refy, gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy .. ton. 21.00 • —
85-300 penetration, tanks, tank-wagon, refy .. ton. 20.00 • —
Aspirin (see Acetylsalicylic Acid).
Atropine, USP, bots ..... oz. 3.90 • 4.50
Atropine sulfate, USP, bots ..... lb. 2.10 • 2.55
Avocado oil, cns ..... lb. 3.25 • —

right as rain

UNIFORM QUALITY
STEADY SUPPLY
PROMPT DELIVERY

ETHYL ALCOHOL
ETHYL ACETATE
BUTYL ALCOHOL
BUTYL ACETATE
ACETONE
ACETALDEHYDE
ACETIC ACID
AMYL ACETATE
REFINED FUSEL OIL
ISOAMYL ALCOHOL

PUBLICKER INDUSTRIES Inc.
1429 WALNUT STREET, PHILADELPHIA 2, PA.
NEW YORK • NEW ENGLAND • MIDWESTERN DISTRIBUTORS, PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022
CHICAGO—RANDOLPH 6-6678.

B

Bacitracin, bulk, 1,000,000,000 or more units	50,000 units.	.65 - —
less than 1,000,000,000 units.	50,000 units.	.70 - —
Balm of Gilead buds, dried, bgs.	lb.	1.35 - 1.45
Barberry root bark, bgs.	lb.	.28 - .30
Barbital, NF, 100-lb. dms.	lb.	4.50 - —
Barbital sodium, NF, dms.	lb.	4.75 - —
Barium carbonate, precip., bgs., c.l., works	ton.	106.50 - —
bgs., smaller lots, works	ton.	121.50 - —
Barium chlorate, dms., works	lb.	.32 - .41
Barium chloride, anhyd., bgs., c.l., works	ton.	176.00 - —
bgs., l.c.l., works	ton.	191.00 - —
NF, cryst, 100-lb. dms.	lb.	.22 - —
Tech., cryst., bgs., c.l., works, 100 lbs.		7.00 - —
bgs., l.c.l., works	100 lbs.	7.75 - —
Barium chromate, bgs., frt. equald.	lb.	.35 - —
Barium dioxide (see Barium peroxide).		
Barium hydrate, cryst., bgs., c.l., t.l., frt equald	ton.	208.00 - —
bgs., l.c.l., t.t.l., frt. equald	ton.	218.00 - —
Barium monoxide (see Barium oxide).		
Barium nitrate, bbls., c.l., t.l., dlvd.	lb.	.16 - —
bbls., l.c.l., l.t.l., dlvd	lb.	.17 - —
Barium oxide, grd., dms., c.l., t.l., frt. equald	ton.	275.00 - —
dms., l.c.l., l.t.l., frt. equald	ton.	285.00 - —
Barium peroxide, dms., frt. equald.	lb.	.20 - —
Barium stearate, ctns., c.l., frt. alld.	lb.	.41 - —
ctns., l.c.l., same basis	lb.	.42 - .46
Barium sulfate, tech. (see Barytes and blanc fixe).		
Barium sulfate, X-ray, dms	lb.	.13 - .15½
Barium sulfide, dms., c.l., works	ton.	95.00 - —
dms., l.c.l., works	ton.	105.00 - —
Barytes, southern, off-color, bgs., mines	ton.	25.00 - —
95-75%, bgs., mines	ton.	25.00 - —
water-grd., paper bgs., c.l., St. Louis	ton.	49.00 - —
paper bgs., c.l., ex whse, New York	ton.	70.85 - —
Battery acid, cbys., c.l., works, E.	100 lbs.	2.35 - —
cbys., l.c.l., works, E	100 lbs.	2.65 - 3.45
Bauxite, bulk, mines	ton.	6.75 -10.00
Bay leaves (see Laurel leaves).		
Bay oil, NF, Puerto Rican, 50-55%, cns.	lb.	2.15 - 3.00
Puerto Rican, 55-60%, cns.	lb.	2.50 - 3.00
West Indian, 50-55%, cns., dms.,	lb.	1.85 - 2.40
Bayberry wax, bgs	lb.	43 - .47
Beeswax, crude, African, bgs.	lb.	.67 - .68
Brazilian, bgs	lb.	.69 - .70
Central American bgs.	lb.	.68 - .69
Chilean, bgs	lb.	.69 - .70
Refd., USP, bleached, white bricks, 100-lb. ctns.	lb.	.79 - .82
white slabs, 100-lb. ctns.	lb.	.78 - .81
yellow bricks, 100-lb. ctns.	lb.	.73 - .76
yellow slabs, 100-lb. ctns.	lb.	.72 - .77
Belladonna leaf, bls.	lb.	.35 - .37
Belladonna root, bls.	lb.	.43 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines	ton.	14.00 - —
Imp., Italian, white, high gel., bgs., 5-ton lots, ex whse.	ton.	84.00 - —
bgs., 1-ton lots, ex whse.	ton.	87.00 - —
low gel., bgs., 5-ton lots, ex whse.	ton.	82.35 - —
bgs., 1-ton lots, ex whse.	ton.	85.35 - —
Benzal chloride, cbys., works	lb.	.44 - —
Benzaldehyde, NF, dms.	lb.	.74 - 1.05
Tech., cbys., dms., t.l.	lb.	.43 - —
cbys., smaller lots	lb.	.44 - —
Benzene, coaltar, pure or nitration, tanks, works:—		
Bethlehem, Pa.	gal.	.36 - —
Birmingham district	gal.	.36 - —
Chicago district	gal.	.36 - —
Cleveland district	gal.	.36 - —
Geneva, Utah	gal.	.36 - —
Johnstown, Pa.	gal.	.36 - —
Lackawanna, N. Y.	gal.	.36 - —
Lone Star, Tex.	gal.	.36 - —
Lorain, Ohio	gal.	.36 - —
Middletown, Ohio	gal.	.36 - —
Minnequa, Colo.	gal.	.36 - —
Philadelphia district	gal.	.36 - —
Pittsburgh district	gal.	.36 - —
Sparrows Point, Md.	gal.	.36 - —
Syracuse, N. Y.	gal.	.36 - —
Terre Haute, Ind.	gal.	.36 - —
Youngstown, Ohio	gal.	.36 - —
Benzene, petroleum, Houston, Tex., tanks	gal.	.38 - .38
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).		
Benzene hexachloride, tech., high gamma, dms., c.l., dlvd.	gamma unit-lb.	.0075- .008
dms., l.c.l., works	gamma unit-lb.	.009 - .0095
low gamma, dms., c.l., dlvd.	gamma unit-lb.	.0075- —
dms., l.c.l., works	gamma unit-lb.	.009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis	lb.	1.19 - —
bbls., l.c.l., same basis	lb.	1.21 - —
Benzidine sulfate, tech., frt. alld., 100% basis	lb.	1.21 - —
Benzidine yellow, AAA, bbls., dlvd.	lb.	2.20 - —
AAOT, bbls., dlvd	lb.	2.45 - —
Lightfast, bbls., dlvd.	lb.	3.25 - —
Benzocaine, dms.	lb.	3.48 - 3.50
Benzoic acid, tech., bbls., dms., 100-lb. lots or more	lb.	.44 - —
USP, bbls., dms., 100-lb. lots or more	lb.	.54 - —
Benzoin gum, Sumatra cs	lb.	.33 - —

Benzol

Benzol quotations, both coaltar and petroleum, may now be found under Benzene.

Benzophenone, dms	lb.	1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works	lb.	2.25 - —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald	lb.	.18 - —
cbys., smaller lots, frt. equald.	lb.	.20 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald.	lb.	.22 - —
cbys., l.c.l., same basis	lb.	.23 - —
tank trucks, dlvd. Metropolitan area	lb.	.21 - —
Benzoyl peroxide, purif., fib. dms., 50 to 1,000-lb. lots, works	lb.	.98 - 1.08
Benzyl acetate, f.f.c., cns., dms	lb.	.60 - 1.00
Benzyl alcohol, NF, dms.	lb.	.64 - .79
Tech., dms., dlvd.	lb.	.47½- .49
Benzyl benzoate, NF, f.f.c., 500-lb. dms	lb.	.62 - —
Benzyl chloride, tech., 13-gal cbys., dms., c.l., works, frt. equald	lb.	.23 - —
13-gal cbys., dms., l.c.l., same basis	lb.	.24 - —
tank trucks, dlvd. Metropolitan area	lb.	.21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns.	lb.	3.60 - 3.90
Benzyl dimethylamine, dms., works.	lb.	2.25 - —
Benzyl formate, cns.	lb.	1.80 - 2.10
Benzyl isoeugenol, cns.	lb.	9.85 - —
Benzyl propionate, bots.	lb.	1.35 - 1.65
Benzyl salicylate, bots.	lb.	1.60 - 1.85
Benzylidine acetone, bots.	lb.	1.75 - 1.80
Benzylidine chloride, (see Benzal chloride).		
Berberine bisulfate, cns.	lb.	35.00 -36.25
Berberine hydrochloride, bots.	lb.	35.00 -36.25
Bergamot oil, nat., NF, Italian, cns.	lb.	10.25 -10.50
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).		
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).		
Betaine, anhyd., 10,000-lb. lots, frt. alld.	lb.	3.00 - —
Betaine hydrochloride, 5,000-lb. lots, frt. alld.	lb.	1.60 - —
Betaine monohydrate, 10,000-lb. lots, frt. alld	lb.	2.60 - —
Betagammapicoline (see b,g-Picoline).		
Betamethylnaphthalene (see b-Methylnaphthalene).		
Betanaphthol (see b-Naphthol).		
Betanaphthylamine (see b-Naphthylamine).		
Betaphenylethylamine (see b-Phenylethylamine).		
BHC (see Benzene hexachloride, tech.).		
Biotin, cryst., bots.	gram	10.00 - —
Biphenyl (see Diphenyl).		
Birchtar oil, crude, cns.	lb.	1.50 - 1.90
Rectified, cns.	lb.	1.75 - —
Bismuth chloride, jars	lb.	5.11 - —
Bismuth hydroxide dms.	lb.	4.65 - —
Bismuth metal, bxs., ton lots	lb.	2.25 - —
Bismuth nitrate, cryst., dms.	lb.	2.10 - 2.17
Bismuth oxide, anhyd., dms.	lb.	4.47 - 5.03
Bismuth oxychloride, dms.	lb.	4.37 - 4.42
Bismuth subcarbonate, USP, dms.	lb.	3.20 - —
Bismuth subgallate, NF, fib. dms.	lb.	3.15 - —
Bismuth subiodide, fib. dms.	lb.	5.37 - —
Bismuth subnitrate, NF, dms.	lb.	2.65 - —
Bismuth subsalicylate, USP, dms	lb.	3.50 - —
Bismuth-ammonium citrate, USP, powd., jars	lb.	4.22 - —
Bisphenol-A, bgs., c.l., t.l., frt. alld.	lb.	.29¾- —
bgs., l.c.l., same basis	lb.	.30¾- —
Blackberry root bark, bls.	lb.	.45 - —
Black haw root bark, bls.	lb.	.63 - .65
Black haw tree bark, bls.	lb.	.45 - .50

Black Pigments

Black pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works	ton.	110.00 - —
bgs., l.c.l., works	ton.	120.00 - —
bgs., l.c.l., New York whse.	ton.	135.00 - —
Blood, dried, 16-16½% ammonia, unit-ton.		5.25 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton.		6.00 - —
Soluble, bgs., c.l.	lb.	.13 - .14
bgs., t.l.	lb.	.15 - .17
bgs., l.t.l.	lb.	.15½- .35¼
Bloodroot, bls.	lb.	.48 - .50

Blue Pigments

Blue pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

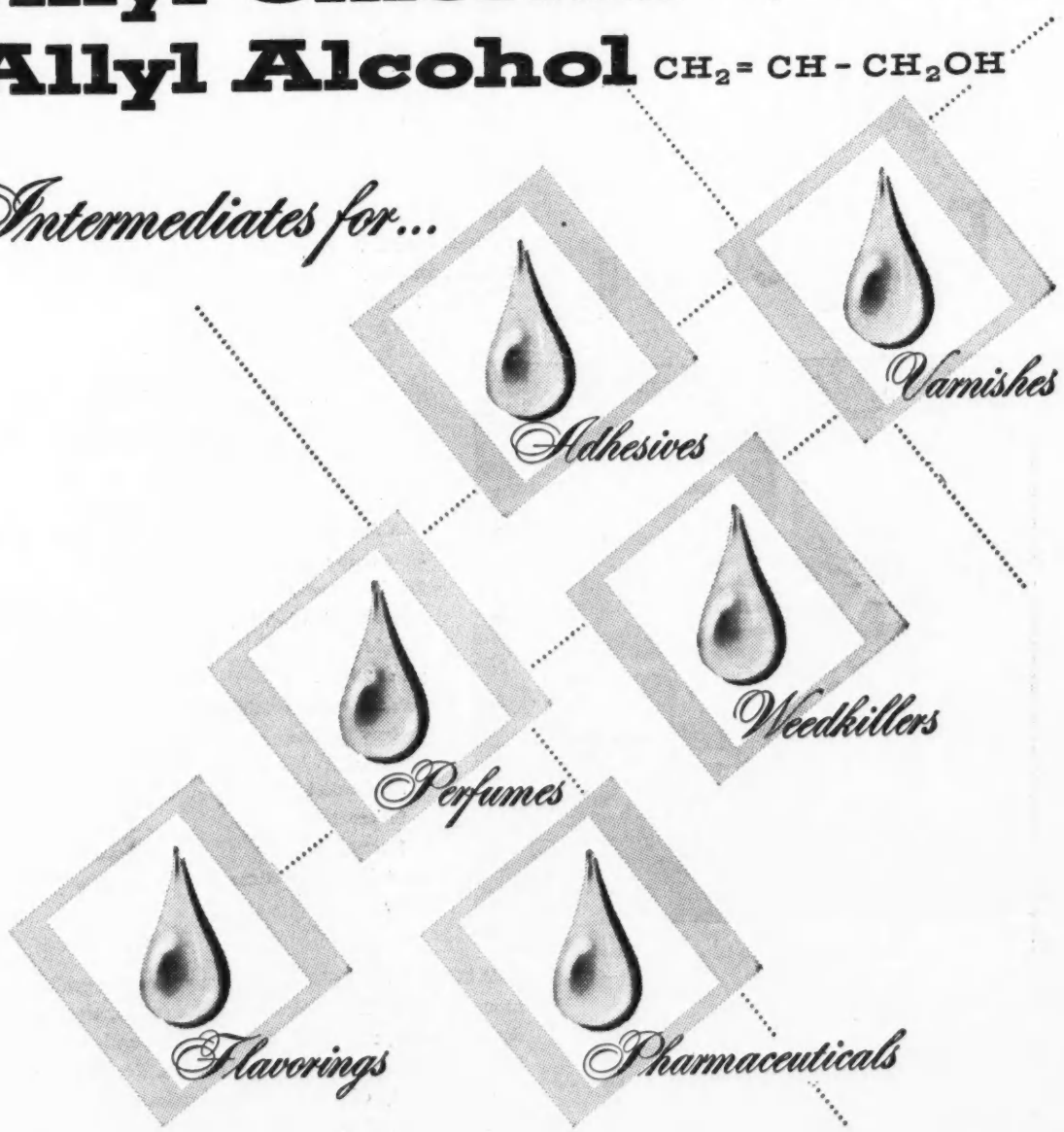
Blue dyes (see Dyes)		
Blue vitriol (see Copper sulfate).		
Bois de rose oil, Brazil, dms.	lb.	3.50 - —
Mexican (see Lignaloe wood oil).		
BON acid maroons, pure, bbls.	lb.	1.75 - —
Resinated, bbls.	lb.	1.50 - —
Bone black, dms., l.c.l., frt. alld.	lb.	.17 - .23¼

Pacific coast bone black prices 2c. per lb. higher.

Allyl Chloride $CH_2=CH-CH_2Cl$

Allyl Alcohol $CH_2=CH-CH_2OH$

Intermediates for...



SHELL CHEMICAL pioneered the production of high purity allyl chloride and allyl alcohol. Today, they have become important intermediates for many valuable chemicals.

Both chemicals are available in drums and tank cars. Conveniently located depots assure prompt shipment.

Your Shell Chemical representative will gladly discuss your allyl alcohol and allyl chloride requirements with you. Write for samples.

SHELL CHEMICAL CORPORATION

CHEMICAL SALES DIVISION—380 Madison Avenue, New York 17, New York

Atlanta • Boston • Chicago • Cleveland • Detroit • Houston • Los Angeles • Newark • New York • San Francisco • St. Louis

IN CANADA: Chemical Division, Shell Oil Company of Canada, Limited • Montreal • Toronto • Vancouver.

SHELL

Bonemeal, steamed, works, E...ton.60.00 - —
Bone oil, dms., works.....lb. .65 - .70
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99%, bgs., c.l., works..ton.83.00 - —
bgs., ton lots, ex whse. New York or Chicago ton.137.25 - —
bgs., smaller lots, same basis..ton.142.25 - —
bulk, c.l., works.....ton.74.00 - —
Tech., cryst., 99½%, bgs., c.l., works..ton.71.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.125.25 - —
bgs., smaller lots, same basis..ton.130.25 - —
gran., decahydrate, 99½%, bgs., c.l., works..ton.45.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.99.25 - —
bgs., smaller lots, same basis..ton.104.25 - —
bulk, c.l., works.....ton.38.50 - —
pentahydrate, 99%, bgs., c.l. works..ton.60.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.114.25 - —
bgs., smaller lots, same basis..ton.119.25 - —
bulk, c.l., works.....ton.53.50 - —

Borax, tech., powd., bgs., c.l., works. ton.50.00 - —
bgs., ton lots ex whse. New York or Chicago.....ton.104.25 - —
smaller lots, same basis..ton.109.25 - —
USP borax $15 per ton higher.
Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. pt. lb. .18 - .24
bgs., l.c.l., same basis.....lb. .19 - .26
Boric acid, tech., 99.9% cryst., bgs., c.l., works..ton.129.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.184.25 - —
bgs., smaller lots, same basis. ton.189.25 - —
dms., c.l., works.....ton.153.50 -173.50
dms., ton lots, ex whse. New York or Chicago.....ton.208.75 -228.75
dms., smaller lots, same basis. ton.213.75 -233.75
99.9% gran., bgs., c.l., works.ton.104.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.159.25 - —
bgs., smaller lots, same basis. ton.164.25 - —
dms., c.l., works.....ton.128.50 -148.50
bgs., ton lots, ex whse. New York or Chicago.....ton.183.75 -203.75
dms., smaller lots, same basis. ton.188.75 -208.75
bulk, c.l., works.....ton.98.00 - —

Boric acid, tech., 99.9% powd., bgs., c.l., works..ton.109.00 - —
bgs., ton lots, ex whse. New York or Chicago.....ton.159.25 - —
bgs., smaller lots, same basis. ton.164.25 - —
dms., c.l., works.....ton.133.50 -153.50
bgs., ton lots, ex whse., New York or Chicago.....ton.188.75 -208.75
bgs., smaller lots, same basis. ton.193.75 -213.75
USP boric acid $25 per ton higher.
Borneol, cns.....lb. 2.50 - 4.50
Boron trifluoride gas, cyls, truckload, works..lb. .62 - —
cyls., l.t.l., works.....lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Broenner's acid, bbls.....lb. 1.76 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies..lb. .32 - —
cs., l.c.l., same basis.....lb. .34 - .39
ret. dms., c.l., t.l., dlvd. E. of Rockies..lb. .31 - —
ret. dms., l.c.l., same basis..lb. .31 - .34
tanks, same basis.....lb. .22½- —
Bromochloromethane, dms., c.l., frt. equald..lb. .48 - —
dms., l.c.l., same basis.....lb. .50 - —
tanks, same basis.....lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys..lb. 1.80 - 1.90
Bromstyrol, bots.....lb. 5.40 - 5.70
Brucine, cns., 100-oz. lots.....oz. .15 - .20
Brucine sulfate, NF, cns., 100-oz. lots..oz. .12 - .18
Buchu leaves, bls.....lb. 1.30 - —

Brown Pigments

Brown pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd., cyls., c.l., refy..lb. .21 - —
cyls., l.c.l., refy.....lb. .22 - —
tanks, contract, refy.....lb. .14¾- .15
Butane, indust., tanks, group 3..gal. .05 - —
n-Butyl acetate, ferment, dms., c.l., frt. alld. lb. .16½- —
dms., l.c.l., same basis.....lb. .17½- —
tanks, same basis.....lb. .14 - —
Syn., dms., c.l., dlvd. E.....lb. .16½- —
dms., l.c.l., same basis.....lb. .17½- —
tanks, same basis.....lb. .14 - —
sec-Butyl acetate, syn., dms., c.l., dlvd. E. lb. .13½- —
dms., l.c.l., same basis.....lb. .14¼- —
tanks, same basis.....lb. .11¾- —
Butyl alcohol, ferment, dms., c.l., frt. alld..lb. .16½- —
dms., l.c.l., frt. alld.....lb. .17½- —
tanks, frt. alld.....lb. .14 - —
Syn., dms., c.l., dlvd.....lb. .16½- —
dms., l.c.l., dlvd.....lb. .17½- —
tanks, dlvd.....lb. .14 - —
sec-Synthetic, dms., c.l., dlvd. lb. .14½- —
dms., l.c.l., dlvd.....lb. .15½- —
tanks, dlvd.....lb. .12 - —
tert-Synthetic, dms., c.l., frt. alld. lb. .14 - —
dms., l.c.l., frt. alld.....lb. .15 - —
tanks, frt. alld.....lb. .12 - —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works..lb. .37½- —
dms., l.c.l., works.....lb. .38¼- —
Butyl ether, dms., c.l., works....lb. .33 - —
dms., l.c.l., works.....lb. .33¾- —
tanks, works.....lb. .31 - —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies..lb. .42½- —
dms., l.c.l., same basis.....lb. .43½- —
tanks, same basis.....lb. .40 - —
Butyl laurate, dms., works.....lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works..lb. .55 - —
dms., l.c.l., works.....lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works..lb. .32 - —
Butyl phenylacetate, dms.....lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld. E. of Mississippi.....lb. .25¾- .26
dms., l.c.l., same basis.....lb. .26½- .26¾
Butylamine (see Mono-, Di- and Tributylamine).
6-tert-Butyl-m-cresol, dms., c.l., works..lb. .55 - —
dms., l.c.l., works.....lb. .56 - —
tanks, works.....lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., works. lb. .27½- —
bgs., l.c.l., works.....lb. .28½- —
Butyraldehyde, dms., c.l., dlvd..lb. .22 - —
dms., l.c.l., dlvd. .....lb. .23 - —
tanks, dlvd. .....lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald..lb. .34 - —
dms., l.c.l., same basis.....lb. .34½- —
tanks, same basis.....lb. .32½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt. alld. E. of Rockies..lb. 6.60 - —
Light shade, bbls., same basis lb. 6.20 - —
Medium shade, bbls., same basis. lb. 5.50 - —
Medium light shade, bbls., same basis lb. 5.10 - —
Orange-red shade, bbls., same basis lb. 4.40 - —
Cadmium CP yellow, all shades, bbls., frt. alld. E. of Rockies. lb. 2.85 - —
Cadmium iodide, 25-lb. fib. dms. lb. 6.75 - 7.00
Cadmium metal, ingots or sticks, cs., dlvd. lb. 1.70 - —
Cadmium-mercury lithopone orange, deep shade, bbls. lb. 1.78 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis. lb. 2.40 - —
Light shade, bbls., same basis. lb. 1.95 - —
Medium shade, bbls., same basis. lb. 2.25 - —
Medium light shade, bbls., same basis. lb. 2.10 - —
Cadmium-selenide lithopone orange, deep shade, bbls., frt. alld. E. of Rockies. lb. 2.00 - —
Light shade, bbls., same basis. lb. 1.80 - —
Cadmium-selenide lithopone red, dark shade, bbls., frt. alld. E. of Rockies..lb. 3.46 - —
Light shade, bbls., same basis lb. 2.14 - —
Maroon shade, bbls., same basis. lb. 3.35 - —
Medium shade, bbls., same basis. lb. 2.67 - —
Medium-light shade, bbls., same basis lb. 2.34 - —
Orange-red shade, bbls., same basis. lb. 1.80 - —
Cadmium-selenide lithopone yellow, all shades, bbls., frt. alld. E. of Rockies lb. 1.15 - —
Caffeine, NF, citrated, dms., 100-lb. lots or more lb. 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 2.80 - —
USP, syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
cryst., hydrous, dms., 100-lb. lots or more..lb. 2.80 - —
Cajeput, oil, native, cns. .....lb. 1.75 - 3.30
Redist., USP, cns. .....lb. 2.25 - 3.40
Calamine, USP, dms. .....lb. .34 - —
Calamus oil, bots. .....lb.12.00 -20.00
Calciferol, cryst., vials, 1-kilo lots, works..gram. .60 - —
Vials, 25 to 100 gram lots, works..gram. .65 - —
Calciferol, in edible oil (see Viosterol).
Calcium p-aminosalicylate, trihydrate, fib. dms., 100 lbs. or more, frt. adjusted....lb. 4.00 - —
Calcium arsenate, dealers, bgs., c.l., frt. alld..lb. .09 - .09½
Calcium bromide, NF, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, dms., c.l., dlvd..ton.134.40 - —

New!

Fortified!

DYLEX® K-34 PAINT LATEX

Koppers latest improvement in styrene-butadiene latices, DYLEX K-34, has superior pigment binding strength . . . improves stain removal, storage stability and freeze-thaw resistance of water-base paints. It can be used alone or in combination with other film formers. Get complete information about this new, fortified paint latex!

SPECIFICATIONS FOR DYLEX K-34

Color	White
Film Appearance	Clear, continuous
Styrene to butadiene ratio	65:35
Specific Gravity (25° C.)	1.015
Solids Content (wt. %)	48 ± 1
Weight per gallon	8.5 lbs.
pH at 25° C.	10 ± 0.5
Latex viscosity (Brookfield)	30 ± 5 cps.
Surface Tension	31 ± 2 dynes/cm.²
Stability	
Mechanical	Excellent
Freeze-thaw	Excellent
Storage	Excellent
Dilutability with Water	Infinite
Odor	Trace

CALL KOPPERS FOR CHEMICALS when you need a quality source of phthalic anhydride, KCN solution, styrene, divinylbenzene, resorcinol, dbpc® or BHT antioxidant, DYLEX styrene-butadiene latices, plastics. Koppers also makes a variety of other quality chemicals; for information, call any of these Koppers Sales Offices:

Pittsburgh • New York • Boston • Philadelphia • Atlanta
Chicago • Detroit • Houston • Los Angeles • San Francisco
In Canada: Dominion Anilines and Chemicals Ltd., Toronto, Ontario

KOPPERS COMPANY, INC.
Chemical Division
Pittsburgh 19, Pennsylvania

KOPPERS CHEMICALS

Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton.10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton.32.00 -34.00
bgs., l.c.l., same basis lb. .10 - .10¼
water-grd., ½ to 10 microns, bgs., c.l., works ton.30.00 - —
10 to 20 microns, bgs., c.l., works ton.17.00 -18.00
Precip., dense, bgs., c.l., works. ton.32.50 - —
bgs., l.c.l., works ton.42.50 - —
medium, bgs., c.l., works ton.38.00 - —
bgs., l.c.l., works ton.48.00 - —
surface treated bgs., c.l., works ton.37.50 - —
bgs., l.c.l., works ton.47.50 - —
ultrafine, bgs., c.l., works ton.110.00 -160.00
bgs., l.c.l., works ton.120.00 -175.00
Calcium chloride, flake, 77-80%, paper bgs., c.l., works, frt. equald ton.31.00 - —
Gran., purif., dms. lb. .27 - —
Liquor, 40%, tanks, frt. equald. ton.12.50 - —
Pellets, bgs., c.l., works ton.37.80 - —
Powd., bgs., c.l., works ton.37.00 - —
Solid, 73-75%, dms., c.l., frt. equald ton.29.50 - —
dms., l.c.l., works, frt. equald. ton.36.00 -73.00
USP, gran., dms lb. .32 - —
Calcium chromate, bgs., frt. equald. lb. .29½ - .30
Calcium cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb. dms lb. 2.95 - —
Calcium gluconate, AA, bbls., dms. lb. .74 - .76
USP, bbls., dms lb. .67 - .69
Calcium hydride, lump, dms., works. lb. 2.20 - 3.00
Calcium hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs.22.95 -25.10
100-lb. dms., same basis dm.30.80 -34.50
Calcium hypophosphite, dms., 1,000-lb. lots lb. 1.28 - —
Calcium iodide, jars lb. 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
Calcium mandelate, USP, dms., works lb. 2.10 - 2.25
smaller lots, works lb. .41 - .48
Calcium naphthenate, liq., 4% Ca., dms., frt. equald lb. .27¼ - —
Calcium pantothenate, dms., bots., frt. adjusted gram. .045 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenolsulfonate, dms lb. .74 - —
Calcium phosphate, dibasic, USP, bgs., c.l., frt. equald 100 lbs. 7.75 - —
bgs., l.c.l., frt. equald.100 lbs. 8.50 - —
Feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton.79.55 -83.25
bgs., l.c.l., frt. equald ton.89.55 -93.25
19% P, c.l., works, Tex. Cit. ton.76.00 - —
21% P, bgs., c.l., t.l., frt. equald ton.94.50 - —
bgs., l.c.l., frt. equald ton.99.50 -104.50
Monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 7.20 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald 100 lbs.10.50 - —
Calcium phytate, bgs., works lb. .50 - —
Calcium resinate, precip., dms., frt. alld., works lb. .30½ - —
Calcium silicate, hydrated, bgs., c.l., works lb. .06 - —
bgs., l.c.l., works lb. .06½ - —
Calcium silicate, paint grade (see Wollastonite).
Calcium stearate, ctns., c.l. lb. .39 - —
ctns., l.c.l. lb. .40 - .44
Calcium sulfate (see Gypsum).
Calomel, USP, powd., dms lb. 5.42 - —
Camphene, 46° m.p., dms. incl., c.l., works lb. .15 - —
dms. incl., l.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Camphene, chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.68 - 3.70
Nat., USP, powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .85 - .90
Syn., tech., 1 bbl. or more lb. .48 - —
Syn., USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
bbls., 1,000-lb. lots lb. .60 - —
bbls., smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
tins, 1,000-lb. lots lb. .91 - —
tins, smaller lots lb. .92 - —
Camphor oil, sassafrassy, dms lb. .28 - .35
White, dms lb. .29 - —
Canada balsam (see Fir balsam).
Cananga oil, native, cns lb. 7.75 - —
Rectified, cns. lb. 9.75 - —
Candelilla wax, crude, bgs lb. .66 - .68
Refd., bgs lb. .71 - .73
Powdered Candelilla wax, 20 to 100 mesh, 7c. higher.
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs. lb. 2.25 - 2.30
Russian, bgs lb. 4.00 - 4.05
powd., bxs. lb. 4.35 - 4.40
Capric acid, dms lb. .25 - .27
Capryl alcohol, 85%, dms., c.l., and t.l., works lb. .19 - —
dms., l.t.l., same basis lb. .19½ - —
tanks, frt. equald lb. .16½ - —
Sec., 92-99%, dms., c.l. lb. .22 - —
dms., l.c.l. lb. .23 - —
tanks lb. .19½ - —
Caprylic acid, dms lb. .25 - .27
Capsicum (see Pepper, red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleo resin, NF, from dom. pepper, dms. lb. 4.50 - 5.25
NF, from African pepper, dms. lb. 4.35 - 5.00
Caraway seed, Dutch, bgs lb. .17 - —
Caraway oil, NF, cns lb. 3.65 - 4.00
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
bgs., l.c.l., works lb. .1225 - —
Furnace, fast extruding, bgs., c.l., works lb. .08 - —
ctns., l.c.l., whse lb. .10 - —
high abrasion, bulk, c.l., works. lb. .0750- —
bgs., c.l., works lb. .0790- —
bgs., l.c.l., dlvd or whse. lb. .122 - .125
high modulus, bgs., c.l., works. lb. .0550- —
ctns., l.c.l., whse lb. .0950- —

Carbon black, furnace, semi-reinforcing, bgs., c.l., works lb. .0450- —
bgs., ctns., l.c.l., whse lb. .0850- —
Pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd or whse. lb. .78 - —
medium color uncompressed, bgs., c.l., works lb. .12 - —
bgs., l.c.l., dlvd or whse lb. .19 - —
Carbon dioxide, indust., wholesale, bulk, dlvd. Metropolitan area ton.73.00 -115.00
cyls., same basis lb. .08 - .09
Solid, wholesale, same basis lb. .035 - .040
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb. .07 - —
55-gal. dms., l.c.l., same basis lb. .08½ - .09
5-gal. dms., 30 dms. to c.l., same basis lb. .13 - —
5-gal. dms., less than 30 dms., same basis lb. .16 - —
tanks, dlvd. lb. .0545- —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾ - —
l.c.l., frt. alld lb. .15¼ - —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾ - —
dms., l.c.l., l.t.l., frt. alld lb. .14¼ - —
tanks, frt. alld lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb lots, works lb. 4.00 - 4.25
dms., smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots lb.38.00 -40.50
Cardamom seed, bleached, "A" lb. 3.20 - —
Bleached, "B" lb. 3.10 - —
Decorticated, Ceylon, cs lb. 3.00 - —
Guatemalan, cs lb. 3.00 - —
Green, Alleppey, bgs lb. 2.15 - —
Ceylon, bgs. lb. 2.15 - —

Carmine No. 40, NF, bulk, 100-lb. lots or more dlvd lb.16.80 - —
bulk, smaller lots, dlvd lb.16.90 -17.30
Carnauba wax, chalky, bgs., ton lots lb. .68 - .69
North country No. 2, crude, bgs., ton lots lb. .77 - .78
refd., pure, ton lots lb. .89 - .90
North country No. 3, Ceara, crude, bgs., ton lots lb. .71 - .72
Ceara, refd., pure bgs., ton lots, lb. .80 - .82
Parnahyba, crude, bgs., ton lots, lb. .72 - .73
Parnahyba, refd., pure, bgs., ton lots lb. .80 - .82
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.37 - 1.39
Parnahyba, bgs., ton lots lb. 1.39 - 1.41
Powdered carnauba wax, 20 to 100 mesh, 7c. higher.
Carotene, tech, 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram. .295 - —
Tech., in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP, microcrystalline in oil, 400,000 A units per gram., dms., dlvd. million units. .21 - —

b-Carotene, in vegetable oil, 400,000 A units per gram, cns. gram. .084 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram, cns. gram. .35 - —
Carvol, bots lb. 4.50 - 8.00
Cascara sagrada bark, bulk lb. .36 - —
Casein, dom., edible, acid precip., 30 mesh, bgs., 10,000-lb. lots or more, works lb. .56 - —
Dom., edible, acid precip., 80 mesh bgs., 10,000-lb. lots or more, works lb. .64 - —
Imp., acid-precip., grd., Argentine, bgs., c.l., duty paid lb. .22 - .22¼
New Zealand, duty paid lb. .25 - .26
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J lb. .22 - —
dms., ton lots, same basis lb. .23 - —
dms., dm. lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75
Cassia, Batavia, "A," bls. lb. .22 - —
"B" lb. .21 - —
"C" lb. .20 - —
Corinje, "A" lb. .20½ - —
"B" lb. .19½ - —
"C" lb. .18 - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor beans, bgs., f.o.b. Brazil. ton.180.00 Nom.

now!
aluminum chloride

ANTIMONY TRICHLORIDE
ANTIMONY PENTACHLORIDE

You can now order any grade or quantity of any of seven Stauffer metallic chlorides from greatly expanded Stauffer facilities.

Stauffer's Aluminum Chloride is shipped in various mesh sizes from Houston, Baton Rouge, Niagara Falls and Elkton, Md., in steel drums of 50 to 625 pounds net, with a fully removable head and venting screw to relieve pressure. The purity of Stauffer Aluminum Chloride exceeds all standard specifications for use in petroleum refining and other organic reactions.

Send for an interesting report, "Aluminum Chloride as a Catalyst".

Stauffer's Antimony Trichloride for catalytic use is delivered solid or as flakes in drums of 25, 50, 100 and 700 pounds net from Niagara Falls. Typical purity is 99.60%.

Al Aluminum Chloride
Sb Antimony Pentachloride
Sb Antimony Trichloride
B Boron Trichloride
Si Silicon Tetrachloride
Ti Titanium Tetrachloride
Zr Zirconium Tetrachloride

STAUFFER CHEMICAL COMPANY
380 Madison Avenue, New York 17, N. Y.
Prudential Plaza, Chicago 1, Ill.
636 California Street, San Francisco 8, Calif.

Stauffer CHEMICALS SINCE 1885

Castor oil, dom., blown, dms., c.l., lb. .2850- —
dms., l.c.l. lb. .2950- —
dehydrated, bodied, dms., c.l., lb. .3010- —
dms., l.c.l. lb. .3110- —
tanks lb. .2810- —
unbodied, dms., c.l. lb. .2860- —
dms., l.c.l. lb. .2960- —
tanks lb. .2650- —
hydrogenated, bgs., ton lots lb. .3375- —
bgs., l.c.l., dlvd. lb. .3575- —
No. 1, dms., c.l. lb. .2500- —
dms., l.c.l. lb. .2600- —
tanks lb. .2300- —
No. 3, tech., dms., c.l. lb. .2350- —
dms., l.c.l. lb. .2450- —
tanks lb. .2150- —
Refd. and deodorized, dms., c.l. lb. .2950- —
dms., l.c.l. lb. .3050- —
USP, dms., c.l. lb. .2850- —
dms., l.c.l. lb. .2750- —
tanks lb. .2450- —
Imp., No. 1, Brazilian, tanks lb. .21 - —
Castor oil, sulfonated, 50%, dms., works lb. .15¼- .15½
75%, dms., works lb. .20 - .20½
Castor oil acids, dehydrated, dms. lb. .44¼- .46¼
split, dms lb. .37¼- .38¼
Castor oil pomace, bgs., c.l., works. ton.45.50 - —
Castoreum, nat., cns. lb. 5.25 -30.00
Syn., cns. lb. 9.00 - —
Catechol, CP, cryst., fib. dms., works lb. 2.17½- —
Resub., dms., works lb. 4.29¼- —
Catnip leaves, Southern, bls. lb. .75 - —
Caustic potash (see Potash, caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil, USP, XIII, cns., dms. lb. 3.75 - 4.25
Cedarwood oil, cns., dms. lb. .65 - 1.00
Celery seed, French, bgs. lb. .41 - —
Indian, bgs. lb. 21 - —
Celery seed, oil, bots lb.15.00 - —
Cellulose acetate, flake, powd., ctns., bgs., 100-lb. lots or more, dlvd. E lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 - .555
27% butyryl content, bgs., dlvd. E lb. .595 - .605
38% butyryl content, bgs., dlvd. E lb. .545 - .555
50% butyryl content, bgs., dlvd. E lb. .585 - .595
50% butyryl alcohol, half-second, bgs., dlvd. E lb. .545 - .555
Cellulose gum, pure, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .55 - —
bgs., smaller lots, same basis. lb .57 - —
Cerium chloride, 48% dms., dlvd lb. .30 - —
Cerium hydrate, 74% CeO, fib. dms., 100-lb. lots or more lb. 1.44 - —
77%CeO, fib. dms., 100-lb. lots or more lb. 1.74 - —
Cerium oxalate, NF, 48%, bgs., works lb. 1.32 - —
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb. 1.85 - 1.98
bgs., smaller lots, dlvd lb. 2.03 - 2.23
Cetyl alcohol, extra fib. cns., 500-lb. lots or more lb. .65 - .72
NF, fib cns., 140-lb. lots or more lb. .48 - —
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, bls lb. .85 - .95
Roman, cs. lb. 3.00 - —
Chamomile oil, blue, Hungarian, bots lb.225.00 - —
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
fib. dms., 5-ton lots, works lb. .26½- .32½
fib. dms., smaller lots works lb. .27 - .50
Charcoal, black (see Charcoal, activated).
Charcoal, bone (see Bone black).
Charcoal, hardwood, bulk, lump, c.l., f.o.b. plant ton.55.00 - —
briquets, c.l., f.o.b. plant ton.80.00 - —
5-lb. paper bgs., c.l., same basis ton.108.00 - —
10-lb. paper bgs., c.l., same basis ton 98.00 - —
25 lb. paper bgs., c.l., same basis ton.88.00 - —
40 lb. paper bgs., c.l., same basis ton.85.00 - —
Charcoal pinewood, gran., bgs., c.l., works, south ton.57.00 - —
bgs., l.c.l., works, south ton.57.00 -67.00
lump, bgs., c.l., works, south. ton.53.50 - —
bgs., l.c.l., works, south ton.56.50 -71.00
bulk, c.l., works, south ton.38.00 - —
bulk, t.l., works, south ton.41.00 - —
Chenopodium oil, NF, cns. lb 4.50 - 4.75
Chestnut extract, imp., solid, 60% tannin, bgs., ex dock, plus duty lb. .08½- —
powd., 70% tannin, bgs., ex dock, plus duty lb. .0959- —
Chicago acid, paste, bbls., frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral, tech., 94% min. dms., c.l., works lb. .23 - —
dms., l.c.l., works lb. .24 - —
tanks, multiple units, 5 cars, works lb. .21 - —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 - —
jars, 500-lb. lots lb. 1.03 - —
jars, 100-lb. lots or less lb. 1.05 - —
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordan, agricultural, dms., c.l., frt. alld lb. .65 - —
dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .66 - —
Clarif., dms., c.l., frt. alld lb. .69 - —
dms., l.c.l., 5,000 to 10,000-lb. lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .16¼- —
dms., l.c.l., same basis lb. .17¼- —
70%, dms., c.l., same basis lb. .18¾- —
dms., l.c.l., same basis lb. .19¾- —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c l., works. lb. .70 - —
ctns., l.c.l., works lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .10¼- —
cyls., l.c.l., Metropolitan area lb. .11¾- .13
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt. equald 100 lbs. 4.05 - —
tanks, multiple units, 3 cars, same basis 100 lbs. 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - —
tanks, multiple units, 1 car, same basis 100 lbs. 7.25 - —

Chloroacetic acid, mono, flake, 99%, dms., c.l lb. .23½- .25½
dms., l.c.l. lb. .24½- —
tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.45 - —
m-Chloroaniline, dms., min. 10,000 lbs., or over, frt. alld lb. .75 - —
dms., less than 10,000 lbs., same basis lb. .80 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .65 - —
dms., l.c.l., same basis lb. .67 - —
tanks, same basis lb. .63 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. metropolitan area lb. 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
dms., 500 to 1,500 lbs., same basis. lb. 2.00 - —
p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works, dlvd. to N. Y. metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib. dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots, works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms. lb. .30 - —
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .81 - —
Powd., dlvd. E., 100% basis lb. .86 - —
4-Chloro-2-nitroaniline, powd., dlvd. E lb. .80 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., bots. lb. 1.50 - —
Coml., cyls., 180 lbs., frt. alld lb. .95 - —
cyls., 100 lbs., same basis lb. .97 - —
cyls., 25 lbs., same basis lb. 1.22 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb. higher.
Choline bitartrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Choline chloride, fib. dms., frt. adjusted lb. 1.25 - 1.35
Choline dihydrogen citrate, fib. dms., frt. adjusted lb. 1.25 - 1.35
Chrome green, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - .42
blue content 16-30%, bbls., same basis lb. .40 - .42
blue content 31-45%, bbls., same basis lb. .41 - .43
blue content 45-49%, bbls., same basis lb. .44 - .46
Reduced color, 25% lb. .19 - .20

Chrome green prices are ½c. higher, dlvd. at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Jospeh; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Chrome orange, CP, bbls., dlvd. N. of Tennessee and N. C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .35 - —

Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex., 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Chrome yellow, CP, bbls., dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .35 - —

Chrome yellow price are ½c. higher dlvd. Ala., Fla., Ga., La., (Shreveport 1½c. higher); Miss., N. C., S. C., Tenn.; Dallas, Tex., 1¼c. higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Dlvd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Chromic acid, 99¾% dms., c.l., works, frt. equald lb. .29½- —
dms., l.c.l., dlvd New York Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, bbls., works lb. .09½- —
cbys., works lb. .11¼- —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms., c.l., frt. alld lb. 1.20 - —
Pure, bgs., c.l., frt. alld lb. .44¾- —
bgs., l.c.l., same basis lb. .45½- —
Chromium trioxide, NF, bots lb. 1.15 - —
Cinchona bark, NF, red, broken, bgs. lb. .35 - .40
NF, yellow, broken, bgs lb. .35 - .40
Cinnamic acid, refd., bots lb. 2.50 - 3.50
Cinnamic alcohol, bots lb. 2.15 - 2.75
Cinnamic aldehyde, dms lb. .95 - 1.25
Cinnamon, Ceylon, No. 2, bgs lb. .98 - —
Ceylon, "0000," bgs., afloat lb. 1.08 - —
Cinnamon bark oil, bots lb.36.00 -70.00
Cinnamon leaf oil, crude, dms lb. 1.60 - 2.00
USP (Cassia), cns., dms lb.10.25 -10.90
Citral, bots., cns. lb. 4.30 - —
Citric acid, USP, anhyd., fine gran., bgs., dms., c.l lb. .29½- .30
bgs., dms., 10,000-lb. lots, 1 shipt lb. .30 - .30½
bgs., dms., smaller lots lb. .30½- .31
Citric acid, USP, hydrous, fine gran., bgs., dms., c.l lb. .27½ - .28
bgs., dms., 10,000-lb. lots, 1 shipt lb. .28 - .28½
bgs., dms., smaller lots lb. .29 - .29½
Powdered citric acid ½c. higher.
Citronella oil, Ceylon, cns., dms lb. .85 - .90
Java, cns. lb. 1.95 - —
Java-type, cns. lb. 1.10 - —
Citronellal, bots., dms lb. 2.85 - 3.50
Citronellol, bots., dms lb. 3.90 - —
Civet, artif., bots lb.13.75 -15.00
Nat., bots. oz. 8.50 -15.00
Clay, ball., dom., airfloated, bgs., c.l., Tenn ton.19.50 - —
crushed, shed moisture, bulk, c.l., Tenn ton.10.00 - —
purif., bgs., c.l., Tenn ton.20.50 - —
Imp., airfloated, bgs., c.l., Atl. port long-ton.42.00 -45.00
lump, bulk, Atl. port long-ton.27.00 -30.20
Clay, China, dom., dry-grd., airfloated, 99%, 325 mesh, bgs., c.l., Georgia, works. ton.10.00 - —
bgs., l.c.l., Georgia, works. ton.15.50 - —
99%, 300 mesh, bgs., c.l., Georgia, works ton.13.50 -14.50
bgs., l.c.l., same basis ton.35.00 -36.00
Imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me gross ton.20.00 -35.00
powd., bgs., c.l., ex dock net ton.50.00 - —
bgs., l.c.l., ex whse net ton.60.00 -65.00
Cleve's acid, mixed, bbls lb. 1.05 - —
Clove, Madagascar, bgs lb. .42½- —
Zanzibar, bgs lb. .47 - —
Clove bud oil, USP, cns., dms lb. 2.65 - 2.85
Clove leaf oil, crude, dms lb. 1.20 - 1.50
CMC, crude, 96%, low or medium vis., bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., less than 23,000 lbs., dlvd. E., 100% basis lb. .41½- .43
65%, low or medium vis., bgs. or fib. dms., c.l., dlvd. E., 100% basis lb. .39½- .41
bgs. or fib. dms., dlvd. E., 100% basis lb. .41½- .43
CMC, purif., high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs, works, frt. alld lb. .53 - —
bgs., smaller lots, same basis. lb. .57 - —

CMC prices W. of the Rockies are 2c. per lb lower and are on a works basis.

Coaltar, crude, resale for soins., dms., c.l., ex whse gal. .30½- —
dms., l.c.l., ex whse gal. .33½- —
tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .30½- .35
dms., l.c.l., ex whse gal. .33½- .39
tanks, works gal. .16½- .20½
Coaltar pitch, aluminum, bulk, works ton.40.00 -42.00
Carbon and indust., bulk, works. ton.40.00 - —
Core, bulk, works ton.36.50 - —
Fiber, bulk, works ton.44.00 - —
Coaltar pitch, roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton.39.00 - —
Cobalt acetate, 23.7% Co, dms., dlvd. lb. 1.10 - —
Cobalt blue, genuine, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.90 - —

Cobalt blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph. 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Cobalt blue imitation (see Ultramarine blue).
Cobalt carbonate, 46% Co, powd., bgs., dlvd lb. 1.57 - —
Cobalt chloride, 24.2% Co, dms., dlvd lb. 1.05 - —
Cobalt hydrate, 60-61% Co, dms., dlvd lb. 2.20 - —
Cobalt linoleate, fused 8½% Co, dms lb. .68 - —
Liq., 6% Co, dms lb. .54¾- —
Cobalt metal, 97-99%, kgs., ex whse. lb. 2.00 - —
Cobalt naphthenate, liq., 6% Co, dms., dlvd lb. .46½- —
Cobalt nitrate, 20.1% Co, bbls., dlvd. lb. .85 - —
Cobalt oxide, black, 72½-73½% Co, kgs lb. 1.52 - —
70-71% Co, kgs lb. 1.48 - —
Cobalt phosphate, powd., 32.1% Co, kgs., dlvd lb. 1.43 - —
Cobalt resinate, fused, 3% Co, dms. lb. .28 - —
Cobalt sulfate, cryst., 21% Co, dms., dlvd lb. .69 - —
Monohydrated, 33% Co, dms., dlvd lb. 1.17 - —
Cobalt tallate, 6% Co, dms., dlvd. lb. .42 - —
Cocaine, USP, cns., 100-oz. lots oz.17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz.13.75 - —
Cocillana bark, bls lb. .25 - —
Cocoa butter, bgs. lb. .63 - .68
Coconut oil, crude, tanks, New York lb. .12¼- —
tanks, Pac. coast lb. .11¾- —
Refd., Cochin type, dms., tax incl lb. .19 - .19½
deodorized, dms., tax incl lb. .21 - .22
Coconut oil acids, dist., dms. lb. .23½- .25½
tanks lb. .21½- —
Dbl. dist., dms. lb. .24½- .26½
tanks lb. .22½- —
Cod oil, Newfoundland, dms. lb. .11⅝- .11⅞
Codeine, NF, cns., 100-oz. lots oz.13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz.11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz.10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz.10.75 - —
Codliver oil, USP, dms. gal. 1.45 - 1.55
Cohosh root, black, bls. lb. .20 - .22
Blue, bls. lb. .20 - .22
Colchicine, USP, bots., cns. oz.29.00 -35.50
Colchicum root, bls. lb. .35 - —
Colchicum seed, bgs. lb. .60 - —
Collodion, USP, dms. lb. .32½- —
Flexible, dms. lb. .34 - —
Colocynth, pulp, bls. lb. .55 - —
Colombo root, bls. lb. .15 - .16
Condurango bark, bls lb. .26 - —
Congo copal gum, No. 1, bgs lb. .24 - .26
Copaiba balsam, cns., dms lb. .60 - .95
Copaiba oil, cns. lb. 1.75 - 2.50
No. 2, bgs. lb. .18½- .20
No. 3, bgs. lb. .15¾- .17
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .34 - —
bgs., l.c.l., works lb. .35½- —
Copper chloride, cupric, anhyd., dms., works lb. .43½- .44
Cryst., dihydrate, dms., works. lb. .29½- .30
Cryst., dried, dms., works lb. .37¾- .38¼
Copper chloride, cuprous, dms., works lb. .43 - .47
Copper cyanide, tech., dms., 20,000-lb. lots or more lb. .698 - —
dms., 1,000-lb. lots or more lb. .708 - —
dms., smaller lots lb. .728 - .748
Copper gluconate, dms lb. 3.15 - 3.35
Copper hydrate, dms., c.l., frt. alld. E. of Miss lb. .51½- —
dms., l.c.l., same basis lb. .52 - —
Copper metal, electrolytic, dlvd. Valley basis lb. .32 - —
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .24 - —
Copper nitrate, tech., cryst., dms., works lb. .33¼- —
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-1,999-lb. lots, works lb. .50 - —
Copper oxide, red, 97%, USN Type I, bbls., 100-5,000-lb. lots, ib. .61 - —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .60½- —
Copper oxychloride, dms., c.l., works lb. .52 - —
dms., l.c.l., works lb. .53½- .63⅛
Copper quinolinolate, fib. dms. lb. 4.25 - 4.50
Copper resinate, precip., dms., frt. alld lb. .34 - —
Copper sulfate, CP, gran., dms., works lb. .1980- —
Cryst., 99%, bgs., c.l., works. 100 lbs.12.90 - —
bgs., l.c.l., same basis 100 lbs.13.40 -15.90
Monohydrated, 35%, dms., c.l., works 100 lbs.22.50 - —
dms., l.c.l., works 100 lbs.23.25 - —
Tribasic, distributors, bgs., c.l., same basis 100 lbs.28.00 - —
l.c.l., same basis 100 lbs.29.00 -33.00
Copper undecylenate, dms lb. 2.00 - 3.00
Copra, Atl., Gulf ports, c.i.f ton.159.00 - —
Pac. ports, c.i.f ton.154.00 - —
Coriander oil, USP, bots ton.10.50 - —
Coriander seed, Moroccan, bgs lb. .12 - —
Rumanian, bgs lb. .09 - .09½
Yugoslavian, bgs. lb. .08½- —
Corn oil, crude, tanks, works lb. .13½- —
Foots (soapstock), acid 95%, tanks, New York lb. .06⅛- —
Refd., salad, dms lb. .1916- .1935
tanks lb. .1716- —
Corn oil acids, dist., dms. lb. .16¾- .18⅜
tanks lb. .14¾- —
Corn starch (see Starch, corn).
½-lb. cns lb. 1.09 - —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.32 - —
paper bgs., l.c.l. 100 lbs. 7.57 - —
Corn syrup, 42°, non-ret. dms., c.l., 100 lbs. 7.30 - —
non-ret. dms., l.c.l. 100 lbs. 7.45 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bulk gram. 3.50 - 3.55
Costus oil, bots. oz. 6.00 - —
Cottonseed meal, 41% bgs., Memphis ton.55.00 Nom.
Cottonseed oil, crude, tanks, South, East lb. .13½- —
tanks, Valley lb. .13 - .13⅛
tanks, Texas, Lubbock lb. .12¾ Nom.
tanks, Waco lb. .13 Nom.
Foots (soapstock), acid 95%, tanks, New York lb. .05 - —
Refd., salad, dms lb. .18¾- .19
tanks lb. .16¾- —
Cottonseed oil acids, dist., dms lb. .15¾- .17¾
tanks lb. .13¾- —
Cottonseed pitch, raw, dms., works. lb. .03 - .03¼
tanks, same basis lb. .02¾- —
Coumarin, NF, cryst, dms lb. 3.60 - —
Cramp bark, NF, bls lb. .85 - .90
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots., cbys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
soln., 80%, tanks, works gal. .226 - —
Refd., dms., c.l., works gal. .42 - .44
dms, l.c.l. same basis gal. .53 - .55
tanks same basis gal. .33 - .35
Creosote oil (see Creosote coaltar).
Creosote, wood, beechwood, cbys., dms lb. 1.60 - 1.65
Hardwood, NF, bots., cbys lb. 1.30 - —
Pinewood, dms., incl., c.l., works. lb. .0561- —
dms. incl., l.c.l., works lb. .0634- —
dms. incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works lb. .0460- —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works lb. .72 - —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. equald lb. .1625- —
non-ret. dms., l.c.l., same basis lb. .1675- —
tanks, same basis lb. .145 - —
USP, non-ret. dms., c.l., same basis lb. .1775- —
non-ret. dms., l.c.l., same basis lb. .1825- —
tanks, same basis lb. .16 - —
m-Cresol, 95-98%, dms., c.l., works. lb. .60 - —
dms., l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .1775- —
dms., l.c.l., same basis lb. .1825- —
tanks, same basis lb. .16 - —
m-p-Cresol, 2.97%, 2°C., dms., c.l., frt. equald lb. .2175- —
dms., l.c.l., same basis lb. .2225- —
tanks, same basis lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald lb. .16¾- —
ret. dms., l.c.l., same basis lb. .17¼- —
tanks, same basis lb. .15 - —
30°-30.49°C., m.p., dms., c.l., frt. equald lb. .16¼- —
ret. dms., l.c.l., same basis lb. .16¾- —
tanks, same basis lb. .14½- —
o-Cresol, m.p., 29°-29.9° C., dms., c.l., frt. equald lb. .15¾- —
ret. dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .14 - —
m.p., 25° 28.9°C., dms., c.l., frt. equald lb. .14¾- —
ret. dms., l.c.l., same basis lb. .15¼- —
tanks, same basis lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .50 - —
dms., l.c.l., dlvd lb. .51 - —
tanks, dlvd. lb. .49 - —
p-Cresyl methyl ether, cns lb. 1.80 - 2.05
Cresylic acid, coaltar, dom., 50%, 207° C. or above, resin and tricresyl phosphate grade, tanks, frt. equald. lb. 1.10 - —
50%, 204° to 207° C., resin grade, tanks, frt. equald. gal. 1.20 - —
50%, 204° to 207° C., tricresyl phosphate grade, tanks, frt. equald. gal. 1.10 - —
50%, 210° or above, non-resin grade, total range over 9° C., dms., c.l., frt. equald. gal. 1.15 - —
dms., l.c.l., frt. equald. gal. 1.19 - 1.20
tanks, frt. equald. gal. 1.00 - —
imp., 75% at 215° C. or over, dms., ex whse. gal. .95 - —

Cresylic acid, petroleum, dom., 195° to 214° C., non-ret. dms., 65 to c.l., works, San Francisco and Los Angeles gal. .80 - —
non-ret. dms., l.c.l., same basis gal. .82 - .84
tanks, same basis gal. .65 - —
200° C. to 232° C., tanks, Wilmington Cal lb. .65 - .72

Cresylic acid, petroleum, dom., 211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. .76 - —
non-ret. dms., l.c.l., same basis gal. .78 - .80
tanks, same basis gal. .61 - —
220° C. to 242° C., tanks, Wilmington, Cal lb. .62 - .67
245° to 295° C., tanks, Wilmington, Cal gal. .50 - —

Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼ - .25

Crotonic acid, fib. dms., 200 lbs. or more, works lb. .50 - —

Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
bgs., l.c.l., works 100 lbs. 14.25 - —

Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .29 - —

Cubeb berries, XX, NF, bgs lb. .70 - —

Powd., cs lb. .85 - —

Cubeb oil, cns. lb 4.10 - 4.25

Cumene, dms., c.l., works lb. .12 - —
dms., l.c.l., works lb. .14 - —
tanks, works lb. .11 - —

Cumin seed, Iranian, bgs lb. .18½ - —
Moroccan, bgs lb. .22 - .23
Turkish, bgs lb. N.P.

Cumin oil, bots., ens lb. 4.75 - 5.00

Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08 - —

Cyanamide, fertilizer mixing grade, 21% N, gran., bgs., Niagara Falls, Ont., contract ton. 55.00 - —
pulv., 21% N, bgs., works. unit-ton. 2.75 - —
Indust. grade, bgs., c.l., works. ton. 75.00 - —
bgs., l.c.l., works ton. 96.00 - —
6-16 mesh, dms., c.l., works. ton. 120.00 - —
dms., l.c.l., works ton. 140.00 - —

Cyanoacetic acid, tech., bbls lb. .90 - 1.25

Cyclohexane, 99% tech., dms., c.l., works gal. .70 - —
dms., l.c.l., works gal. .72 - —
tanks, works gal. .55 - —

Cyclohexanol, tech., dms., c.l., works, frt.alld., E lb. .28 - —
dms., l.c.l., works, same basis. lb. .29 - —
tanks, works, same basis lb. .24 - —

Cyclohexanone, tech., dms., c.l., works lb. .32½ - —
dms., l.c.l., works lb. .35 - —
tanks, works lb. .29 - —

Cyclohexene, min. 98% b.r., 82.5° C. 85° C., 360-lb. dms., c.l., works lb. .55 - —
360-lb. dms., l.c.l., same basis. lb. .60 - —
tanks, same basis lb. .52 - —

Cyclohexylamine, dms., c.l., works. lb. .49 - —
dms., l.c.l., works lb. .50 - —
tanks, works lb. .47 - —

Cyclopropane, CP, 2-lb. cyls., works. cyl. 48.00 - —
6-oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots. gal. .38 - —
cyls., 100-gal. lots. gal. .37 - —
cyls., 200-gal. lots gal. .36 - —

Cypress oil, bots lb. 5.30 - —

D

2,4-D tech., bags., dms., c.l., works, frt. equald lb. .37 - —
bgs., dms., l.c.l., same basis lb. .42 - .46

2,4-D butyl ester, dms., c.l., works lb. .40 - —
dms., l.c.l., same basis lb. .45 - .49
tanks, same basis lb. .39 - —

2,4-D isopropyl ester, dms., c.l., works lb. .40 - —
dms., l.c.l., works lb. .45 - .49
tanks, works lb. .39 - —

Dammar gum, Batavia, A/E. cs lb. No stocks.
dust, bgs. lb. .16 Nom.
E, bgs. lb. .20 Nom.

Dammar gum, East India, batu, bold, bgs lb. .13¾ - .15
nubs and chips, bgs. lb. .08¼ - .09½
black, bold, bgs. lb. .14½ - .16½
unscraped, bgs. lb. .12 - .13½
nubs and chips, bgs. lb. .11½ - .13
pale, chips, bgs. lb. .13 - .15
nubs, bgs. lb. .17¾ - .20

Siam, cs. lb. .37½ - .40
Singapore, No. 1, bgs. lb. .44¼ - .47
No. 2 bgs. lb. .32 - .34
No. 3, bgs. lb. No stocks
dust, bgs. lb. .17 - .19
seeds, bgs. lb. No stocks.

Dandelion root, bls. lb. .32 - —

DDD, tech., flaks,grd. fib. dms., c.l., works lb. .45 - —
fib. dms., l.c.l., works lb. .46 - —

DDT powder, bgs., cl, works, frt equald lb. .23 - .27
bgs., smaller lots, same basis lb. .24 - .28
fib. dms., c.l., same basis lb. .24 - .28
fib. dms, smaller lots, same basis lb. .25 - .29

1-Decanol, tech., dms., c.l., dlvd. lb. .41 - —
dms., l.c.l., dlvd. lb. .43 - —
tanks, dlvd. lb. .38½ - —

Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .23½ - —
dms., l.c.l., dlvd lb. .24½ - —
tanks, dlvd. lb. .21 - —
Perfume grade, bots lb. 1.75 - 2.00

Decyl alcohol, normal (see 1-Decanol).

Deertongue leaves, bls. lb. .45 - —

Defluorinated phosphate, feed grade, 13% P. paper bags., c.l., t.l., works ton. 49.50 - —
Feed grade, 17% P, paper bgs., c.l., t.l., works ton. 58.00 - —
18% P, paper bgs., c.l. t.l., works ton. 64.10 - —

Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

Degras, common, bbls. lb. .10 - .12
Neutral, bbls. lb. .21 - .23

Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms, c.l., dlvd. E. of Rockies gal. .64½ - .66
dms., l.c.l., same basis gal. .69½ - .77
tanks, dlvd., same basis gal. .48½ - .50

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl, SD1, dms., dlvd. E. of Rockies gal. .65½ - —
dms., l.c.l., same basis gal. .70½ - .76½
tanks, same basis gal. .49½ - —

SD2B, dms., c.l., dlvd. E. of Rockies gal. .64 - —
dms., l.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —

SD3A, dms., c.l., dlvd. E. of Rockies gal. .63 - —
dms., l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —

Denatured alcohol, SD23A, dms., c.l., dlvd. E. of Rockies gal. .655 - —
dms., l.c.l., same basis gal. .705 - .765
tanks, same basis gal. .495 - —

SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —

SD29, dms., c.l., dlvd. E. of Rockies gal. .645 - —
dms., l.c.l., same basis gal. .695 - .795
tanks, same basis gal. .485 - —

SD30, dms., c.l. dlvd. E. of Rockies gal. .63 - —
dms., l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —

SD35A, dms., c.l., dlvd. E. of Rockies gal. .66 - —
dms., l.c.l., same basis gal. .71 - .77
tanks, same basis gal. .50 - —

SD40, dms., c.l., dlvd. E of Rockies gal. .64 - —
dms., l.c.l., same basis gal. .69 - .75
tanks, same basis gal. .48 - —

For anhyd. alcohol on above formulas, prices are 7c. per gal. higher.

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c. differential on tankcars is maintained.

d-Desoxyephedrine hydrochloride, bots. lb. 24.00 - 25.00

dl-Desoxyephedrine hydrochloride, bots. lb. 6.50 - —

Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.33 - —
paper bgs., l.c.l. 100 lbs. 9.48 - —
canary, dark, paper bgs., c.l. 100 lbs. 9.17 - —
paper bgs., l.c.l. 100 lbs. 9.32 - —
light, paper bgs., c.l. 100 lbs. 9.07 - —
paper bgs., l.c.l. 100 lbs. 9.22 - —
white, paper bgs., c.l. 100 lbs. 8.91 - —
paper bgs., l.c.l. 100 lbs. 9.06 - —

Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.

Dextrin, potato, imp., bgs. lb. .10½ - .11

Destrose, USP, dms. lb. .17¾ - —

Diacetone alcohol, acetone-free, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., dlvd lb. .16 - —
tanks, dlvd. lb. .125 - —

Tech., dms., c.l., dlvd. lb. .145 - —
Dms., l.c.l., dlvd. lb. .155 - —
tanks, dlvd. lb. .12 - —

Diacetyl, flavor grade, bots lb. 4.25 - 5.50

Di-sec-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½ - —

Di-tert-amyl phenol, dms., c.l., works lb. .32 - —
dms., l.c.l., works lb. .33 - —
tanks, works lb. .29½ - —

o-Dianisidine, fib., dms. lb. 2.00 - —

Dibenzyl sebacate, dms., c.l., works. lb. .89¾ - .90
dms., l.c.l., same basis lb. .90¼ - .91
tanks, same basis lb. .88 - —

p-Dibromobenzene, bgs., 500-lb. lots. lb. .55 - —

Dibutyl fumarate, dms., c.l. t.l., frt. alld lb. .33 - —
dms., l.c.l., l.t.l., frt. alld lb. .34 - —
tanks, frt. alld lb. 30½ - —

Dibutyl maleate, dms, c.l., t.l., frt. alld lb. .33 - —
dms., l.c.l., l.t.l., dms. frt. alld lb. .34 - —
tanks, frt. alld lb. .30½ - —

Dibutyl phthalate, dms., c.l., dlvd. E. lb. .32½ - —
dms., l.c.l., same basis lb. .33½ - —
tanks, same basis lb. .30 - —

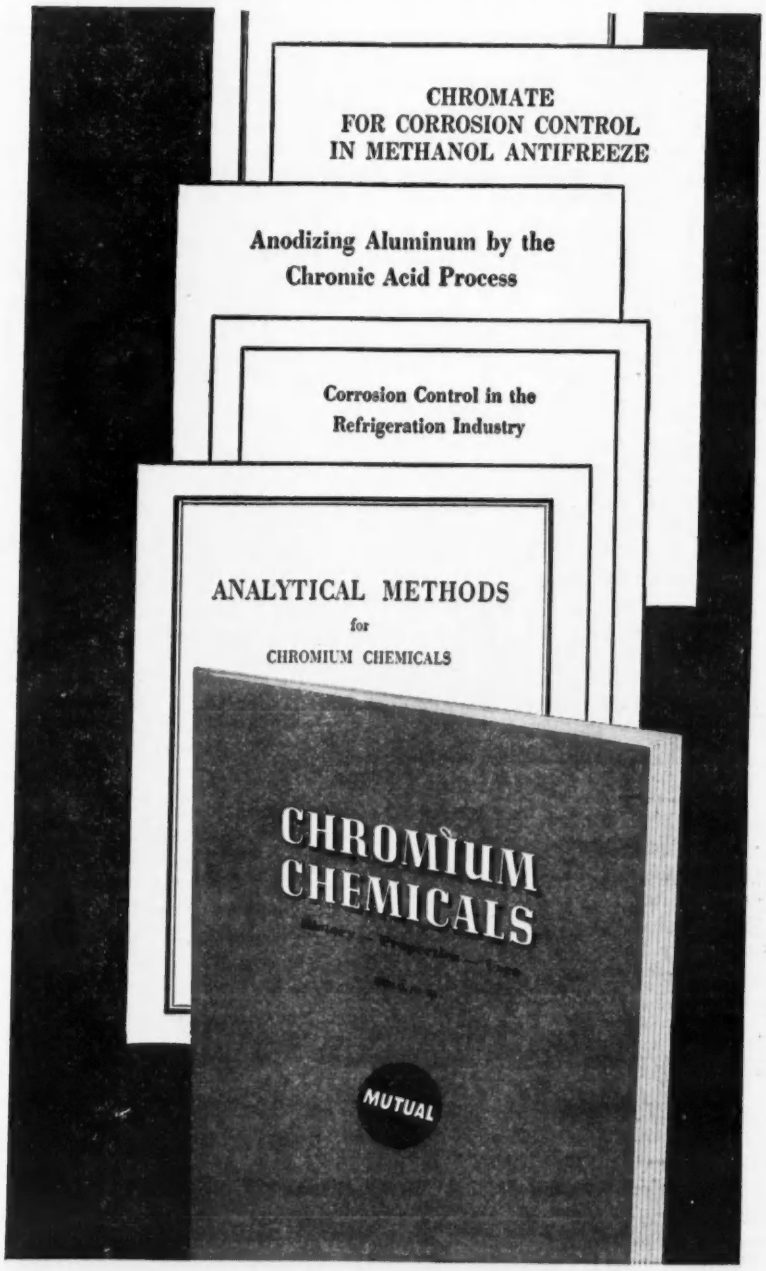
Dibutyl sebacate, dms., c.l., works lb. .66 - —
dms., l.c.l., works lb. .66½ - .67
tanks, works lb. .64 - .64½

Dibutyl tartrate, dms., works, frt. alld lb. .64 - —

Dibutylamine, dms., c.l., dlvd lb. .55½ - —
dms., l.c.l., same basis lb. .56½ - —
tanks, same basis lb. .53 - —

2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l., c.l., dlvd lb. 1.20 - —
dms., l.t.l., dlvd. lb. 1.24 - —

Tech., dms., c.l., dlvd. lb. .91 - —
dms., l.c.l., dlvd lb. .95 - —
tanks, dlvd. lb. .86 - —



PLEASE ORDER BY NUMBER

No. 13—Anodizing Aluminum by the Chromic Acid Process

No. 34—Corrosion Control in the Refrigeration Industry

No. 35—Corrosion Control in Air Conditioning

No. 36—Chromate Corrosion Inhibitors in Chloride Systems

No. 39—Chromate Corrosion Control for Engine-Jacket Water

No. 51—Analytical Methods for Chromium

No. 52—Chromium Chemicals, History—Properties—Uses

No. 54—Koreon—One-Bath Chrome Tan for Leather

No. 57—Double Alkali Chromates or Transition Elements

No. 65—Regeneration of Chromic Acid Solutions by Cation Exchange

No. 76—Chromium Chemicals Used in Wood Preservation

No. 93—Chromate for Corrosion Control in Methanol Antifreeze

No. 144—Chromate Treatment for Preserving Exterior Brightness of Processed Food Containers

No. 153—Inhibiting Corrosion of Steel, Aluminum, and Magnesium Intermittently Exposed to Brines.

If you use chromium chemicals, these publications will help you

Order the titles you want from the list above. All are free to anyone interested in chromium chemicals.

MUTUAL CHEMICAL DIVISION
ALLIED CHEMICAL & DYE CORPORATION
61 BROADWAY • NEW YORK 6, N. Y.

Dicapryl Phthalate—Dipropylene Glycol

Dicapryl phthalate, dms., c.l., dlvd. lb. .31 - .32
dms., l.c.l., dlvd. lb. .32 - .33
tanks, dlvd lb. .27½ - —
Dicapryl sebacate, dms., c.l., works. lb. .63 - —
dms., l.c.l., works lb. .63½ - .64
tanks, works lb. .61 - —
Dichlorophenoxyacetic acid (see 2,4-D).
2,5-Dichloroaniline, dms., works lb. .83 - —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¼ - —
dms., l.c.l., same basis lb. .13¼ - —
tanks, same basis lb. .10¾ - —
p-Dichlorobenzene, dms., c.l., f.o.b. works lb. .12 - .14½
dms., l.c.l., same basis lb. .17 - —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½ - —
dms., l.c.l., or l.t.l., works lb. .34 - —
tanks, works lb. .32 - —
Dichlorodiphenyltrichlorothane (see DDT).
Dichloropentanes, dist., dms., c.l., works lb. .05 - —
dms., l.c.l., works lb. .06 - —
tanks, works lb. .03 - —
Dicyclohexylamine, dms., c.l., works. lb. .54 - —
dms., l.c.l., works lb. .55 - —
tanks, works lb. .52 - —
Dicyclohexyl phthalate, fib. dms., c.l., works, frt. alld lb. .58¼ - .59
fib. dms., l.c.l., same basis lb. .59¼ - .60

Didecyl phthalate, dms., c.l., works. lb. .34 - —
dms., l.c.l., same basis lb. .35 - —
tanks, same basis lb. .31½ - —
Dieldrin, dms., frt. alld lb. 1.80 - —
dms., l.c.l., frt. alld lb. 1.85 - —
Diethanolamine, dms. c.l., dlvd. E. lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .24½ - —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate, dms., c.l., frt. alld. lb. .47 - —
dms., l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½ - —
dms., l.c.l., dlvd lb. .70½ - —
tanks, dlvd lb. .67 - —
Diethyl oxalate, dms., c.l., frt. alld. lb. .42 - —
dms., l.c.l., same basis lb. .43 - .45
tanks, same basis lb. .40 - —
Diethyl phthalate dms., c.l., dlvd. lb. .30 - .30½
dms., l.c.l., dlvd lb. .31 - .31½
tanks, dlvd lb. .27½ - .28
Diethyl sulfate, dms., c.l., works lb. .19 - —
dms., l.c.l., works lb. .19¾ - —
tanks, works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
tanks, same basis lb. .48½ - —

N,N-Diethylaniline, dms., c.l., frt. alld lb. .57 - —
dms., l.c.l., same basis lb. .58 - —
tanks, same basis lb. .55 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).
Diethylene glycol, dms., c.l., dlvd. E lb. .17¾ - —
dms., l.c.l., same basis lb. .18¾ - —
tanks, same basis lb. .15¼ - —
Diethylene glycol boriborate, dms., l.c.l lb. .31 - —
Diethylene glycol diethyl ether, dms., c.l., works lb. .47½ - —
dms., l.c.l., works lb. .48¼ - —
Diethylene glycol monobutyl ether, dms., c.l., dlvd E lb. .30¾ - —
dms., l.c.l., dlvd. E lb. .31¾ - —
tanks, dlvd. E lb. .28¼ - —
Diethylene glycol monobutyl ether acetate, dms., c.l., works. lb. .30¼ - —
dms., l.c.l., works lb. .31 - —
tanks, dlvd. E lb. .28¼ - —
Diethylene glycol monoethyl ether, dms., c.l., dlvd lb. .22½ - —
dms., l.c.l., dlvd lb. .23½ - —
tanks, dlvd lb. .20 - —
Diethylene glycol monoethyl ether acetate, dms. c.l., works. lb. .27¼ - —
dms., l.c.l., works lb. .28 - —
tanks, dlvd. E lb. .25¼ - —
Diethylene glycol monomethyl ether, dms. c.l., dlvd lb. .20½ - —
dms., l.c.l., dlvd lb. .21½ - —
tanks, dlvd lb. .18½ - —
Diethylenetriamine, dms., c.l., dlvd. E lb. .44 - —
dms., l.c.l., dlvd. E lb. .45 - —
tanks, dlvd. E lb. .41½ - —

Diethylstilbestrol, USP bots., 10-kilo lots kilo 100.00 - 147.50
bots., 1-kilo lot kilo 110.00 - 152.50
Digitalis leaves, USP, dom., dms lb. 1.20 - —
Digitoxin, USP, bots gram. 4.40 - 5.00
Diglycol laurate, dms lb. .32¾ - .34
Diglycol stearate, dms., ton lots lb. .26 - .28
Diglycolic acid, bgs., works lb. .14 - —
Dihexyl sebacate, dms., c.l., works. lb. .64 - —
dms., l.c.l., works lb. .64½ - .65
tanks, works lb. .62 - —
Dihydrazine sulfate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .0850- .0875
Dihydrostreptomymin sulfate, bulk, gram. .0850- .0875
1,2-Dihydroxy anthraquinone, dms., works lb. 2.75 - —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms. lb. 2.55 - —
tech., dms lb. 1.09 - —
Di-isobutyl ketone, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
Di-isobutyl phthalate, dms., c.l., dlvd. E lb. .31½ - —
dms., l.c.l., same basis lb. .32½ - —
tanks, same basis lb. .29 - —
Di-isobutylene, dms., c.l., dlvd. E lb. .10 - —
dms., l.c.l., dlvd. E lb. .11½ - —
tanks, dlvd. E lb. .08 - —
Di-iso-octyl phthalate, dms., c.l., dlvd lb. .31 - —
dms., l.c.l., same basis lb. .32 - —
tanks, same basis lb. .28½ - —
Di-iso-octyl sebacate, dms., c.l., works lb. .63½ - —
dms., l.c.l., works lb. .64½ - —
tanks, works lb. .61 - —
Di-isopropanolamine, dms., c.l., dlvd. lb. .23¼ - —
dms., l.c.l., same basis lb. .24¼ - —
tanks, same basis lb. .20¾ - —
Di-isopropylamine, dms., c.l., dlvd. E. of Rockies lb. .50½ - —
dms., l.c.l., same basis lb. .51½ - —
tanks, same basis lb. .48 - —
Dillseed, dewhiskered, bgs lb. .09¼ - —
Nat., bgs lb. .08 - —
Dillseed oil, bots lb. 2.80 - 4.25
Dillweed oil, dom., bots., dms lb. 3.25 - 4.25
Dimethyl anthranilate, cns lb. 4.35 - 5.10
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd lb. 1.225 - —
dms., l.c.l., dlvd lb. 1.235 - —
tanks, dlvd lb. 1.20 - —
70%, dms., c.l., dlvd., 100% basis, contained amines lb. .68½ - —
dms., l.c.l., dlvd., 100% basis. lb. .69½ - —
tanks, dlvd., 100% basis lb. .66 - —
Dimethyl hydroquinone, dms lb. 2.20 - 2.25
Dimethyl phthalate, dms., c.l., works lb. .31 - —
dms., l.c.l., works lb. .32 - —
tanks, works lb. .28½ - —
Dimethyl sebacate, dms., c.l., works. lb. 1.275 - —
dms., l.c.l., dlvd lb. 1.285 - —
tanks, works lb. 1.25 - —
Dimethyl sulfate, 55-gal. ret. dms., c.l., works lb. .15 - —
55-gal. ret. dms., l.c.l., works lb. .16 - —
10-gal. ret. dms., l.c.l., works lb. .16½ - —
Dimethylamine, 25% soln., dms., c.l., frt. equald lb. .42 - —
dms., l.c.l., frt. equald lb. .42½ - —
tanks, frt. equald lb. .33 - —
40% soln., dms., c.l., frt. equald. lb. .39 - —
dms., l.c.l., frt equald lb .39½ - —
tanks, frt. equald lb. .33 - —
N,N-Dimethylaniline, dms., c.l., frt. alld lb. .32 - —
dms., l.c.l., frt. alld. lb. .33 - —
tanks, frt. alld lb. .30 - —
N,N-Dimethylformamide, dms., works lb. .34 - .39
tanks, works lb. .32 - —
2,4-Dinitroaniline, dms., 1,000-lb. lots, frt. equald lb. .68 - —
dms., smaller lots, frt. equald lb. .71 - —
Dinitroaniline orange toner, CP bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including Davenport, and E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. 1.50 - —
m-Dinitrobenzene, 85°C., dms lb. .22 - —
89° C., dms lb. .24 - —
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld E lb. .15¼ - —
dms., l.c.l., frt. alld. E lb. .15¾ - —
tanks, frt. alld E lb. .15 - —
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms., c.l., frt. alld. E lb. .20¼ - —
dms., l.c.l., frt. alld. E lb. .20¾ - —
tanks, frt. alld. E lb. .20 - —
2,4-Dinitrophenol, bbls lb. .37 - —
2,4-Dinitrotoluene, oily, dms lb. .11 - —
Refd., 63°C., dms lb. .23 - —
Dioctyl adipate, dms., c.l., works. lb. .42½ - —
dms., l.c.l., works lb. .43½ - —
tanks, works lb. .40 - —
Dioctyl phthalate dms., c.l., frt. alld lb. .30½ - .31
dms., l.c.l., frt. alld lb. .31½ - .32
tanks, frt. alld lb. .28 - .28¼
Dioctyl sebacate, dms., c.l., works. lb. .60½ - —
dms., l.c.l., works lb. .61½ - .62½
tanks, works, dlvd lb. .58 - .58½
1,4-Dioxane, dms., c.l., works lb. .28¾ - —
dms., l.c.l., works lb. .29¼ - —
tanks, works lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., l.c.l., works. lb. .35 - —
Dipentene, dest.-dist., dms., c.l., works gal. .47 - —
dms., l.c.l. works gal. .52 - —
dms., l.c.l., ex whse gal. .62 - —
Steam-dist., dms., c.l., works, south gal. .59 - —
dms., c.l., dlvd. New York gal. .67 - —
tanks, works, south gal. .45 - —
Diphenyl, bbls., c.l., works lb. .15 - —
bbls., l.c.l., works lb. .16 - —
Diphenyl in bags ¼c. lower.
Diphenyl oxide, perfume grade, cns. lb. .56 - .61
Diphenyl phthalate, dms., c.l., works. lb. .51¾ - —
dms., l.c.l., works lb. .53¾ - —
Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .33 - —
bgs., l.c.l., same basis lb. .35 - —
Refd., fused, tanks, same basis lb. .31 - —
Tech., fused, tanks, same basis lb. .30 - —
Diphenylguanidine, bgs., dms., ton lots, frt. alld lb. .52 - —
bgs., smaller lots, frt. alld lb. .53 - —
Diphenylhydantoin-sodium USP, dms lb. 3.00 - 3.60
Dipropylene glycol, dms., c.l., frt. alld lb. .17¾ - —
dms., l.c.l., frt. alld lb. .18¾ - —
tanks, frt. alld lb. .15¼ - —
Dipropylene glycol methyl ether, dms., c.l., dlvd. E lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½ - —

You can combine any or all Blockson chemicals in one car or truckload and receive the carload price on each item. You'll find that this "one stop" purchasing simplifies your scheduling. A collect phone call to Blockson instantly expedites any unforeseen needs.

You'll carry far less inventory, since Blockson can be depended on to vary the flow of Phosphates precisely to your changing requirements regardless of changing market conditions. For further information, call Blockson or your Blockson distributor.

BLOCKSON CHEMICAL COMPANY
Division of Olin Mathieson Chemical Corporation
Joliet, Illinois

Also major producers of:
Hydrofluoric Acid
Sulfuric Acid
Sodium Fluoride
Sodium Silicofluoride
Hygrade Fertilizer
Teox 120
Nonionic Surfactant

WAREHOUSE STOCKS AT ALL BLOCKSON DISTRIBUTORS

Dithiodibenzoic acid, dms., 1,000-lb. lots, works lb. 1.45 • —
Di-o-tolylguanidine, dms., ton lots, frt. alld lb. .62 • —
dms., smaller lots, frt. alld lb. .63 • —
Divi-divi, 45% tannin, bgs., bls., c.l., US ports, ex dock ton.80.00 • —
Divinylbenzene, 20-25%, dms., c.l., works, frt. equald lb. .20 • —
dms., l.c.l., same basis lb. .21 • —
tanks, same basis lb. .19 • —
50-60%, dms., c.l., works, 100% basis lb. 1.00 • —
dms., l.c.l., works, 100% basis lb. 1.05 • —
Dodecylbenzene, dms., c.l., frt. alld lb. .14½- —
dms., l.c.l., same basis lb. .15½- —
tanks, same basis lb. .12½- —
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb lots, dlvd:—
Blue, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb.15.65 -17.60
Green, FD&C, No. 1 lb.15.65 -17.60
No. 2 lb.19.60 -22.85
No. 3 lb.21.30 -35.90
Red, FD&C, No. 1, cns lb. 5.90 - 7.85
No. 2 lb. 3.30 - 4.10
No. 3 lb.19.60 -22.85
No. 4 lb. 5.55 - 7.50
Violet, FD&C, No. 1, cns lb.15.65 -17.60
Yellow, FD&C, No. 1, cns lb. 9.15 -11.05
No. 5 lb. 3.30 - 4.10
No. 6 lb. 3.30 - 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:
Black, D&C, No. 1 lb.10.50 -10.95
Brown, D&C, No. 1 lb.15.65 -16.10
Green, D&C, No. 5 lb.15.65 -16.10
No. 6 lb.15.65 -16.10
No. 7 lb.14.35 -14.80
Orange, D&C, No. 3 lb.10.50 -10.95
No. 4 lb.19.60 -20.05
No. 5 lb. 5.25 - 5.70
Red, D&C, No. 17 lb.10.50 -10.95
No. 18 lb.23.55 -24.00
No. 19 lb.15.00 -15.45
No. 21 lb. 3.10 - 3.60
No. 22 lb.10.50 -10.95
No. 28 lb.24.20 -24.65
No. 33 lb.17.00 -17.45
Violet, D&C, No. 2 lb.15.65 -16.10
Yellow, D&C, No. 7 lb.10.50 -10.95
No. 8 lb.10.50 -10.95
No. 10 lb.13.05 -13.50
No. 11 lb.13.05 -13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—
Blue, Ext. D&C, No. 1, cns lb.15.65 -16.10
Green, Ext. D&C, No. 1, cns lb.15.65 -16.10
Red, Ext., D&C, No. 1, cns lb.13.05 -13.50
Yellow, Ext., D&C, No. 1, cns lb.10.50 -10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale or prototype) contract, dlvd. No.
20 Chrysoidine Y, dustless lb. .89 • —
27 Fast light, orange 2G lb. 1.29 • —
31 Phloxine 2G lb. 1.05 • —
36 Yellow 2G lb. 1.18 • —
40 Orange R, extra, conc lb. 1.52 • —
57 Fuchsine 6B lb. 1.55 • —
79 Scarlet 2R lb. 1.16 • —
151 Orange AD lb. .79 • —
161 Orange RR lb. .94 • —
176 Fast red A lb. 1.39 • —
179 Rubine XX, conc lb. 1.47 • —
180 Blue F4B lb. 1.31 • —
185 Brilliant scarlet 3RN, conc. lb. 1.20 • —
202 Chrome blue black R, conc. lb. 1.07 • —
203 Chrome black T lb. 1.11 • —
208 Fast blue SR lb. 1.30 • —
216 Chrome red B lb. 1.09 • —
234 Brown Y lb. 1.27 • —
246 Blue black, extra, conc lb. 1.37 • —
275 Milling red 3R, conc. lb. 1.91 • —
289 Navy blue 3R, conc lb. 1.70 • —
299 Black F, conc lb. 2.19 • —
304 Neutral black 2B, conc lb. 2.61 • —
326 Fast scarlet 4BNC lb. 2.12 • —
332 Bismark brown RX, conc., dustless lb. 1.37 • —
365 Brilliant yellow, conc lb. 3.11 • —
382 Scarlet B lb. 2.60 • —
401 Diazo black BHD lb. .93 • —
406 Blue 2B, extra conc lb. 1.53 • —
419 Red FC lb. 1.45 • —
420 Brown M lb. 1.40 • —
448 Red 4BX conc lb. 1.69 • —
518 Diamine sky blue FF, extra, conc lb. 1.95 • —
561 Brown B lb. 2.89 • —
581 Black EB, 200% lb. 1.33 • —
593 Green BY, conc lb. 1.02 • —
596 Yellow brown K, extra lb. 1.26 • —
620 Yellow 2G lb. 1.31 • —
639 Fast Yellow GG lb. 2.32 • —
640 Yellow XX lb. 2.30 • —
655 Yellow OX lb. 2.64 • —
657 Green V lb. 2.73 • —
662 Brilliant green G lb. 3.62 • —
667 Milling green 6B, conc lb. 4.78 • —
671 Blue EG lb. 1.85 • —
681 Crystal violet powder lb. 2.15 • —
698 Violet 6BN powder lb. 2.25 • —
720 Brilliant blue BBG lb. 2.44 • —
729 Blue B, extra conc lb. 3.61 • —
749 Red BX lb. 4.76 • —
800 Chinoline yellow ZSS lb. 2.67 • —
814 Yellow NN, conc lb. 3.67 • —
841 Safranine GF, extra, conc lb. 4.11 • —
860 Induline base ZM lb. 1.07 • —
865 Nigrosine J lb. 4.76 • —
922 Blue GXX lb. 2.22 • —
978 Black GXCF, conc lb. .38 • —
1034 Alizarine red SC lb. 3.31 • —
1054 Alizarine blue SAPX lb. 3.78 • —
1078 Alizarine green CG, extra lb. 3.53 • —
1085 Alizarine blue black B lb. 3.02 • —
1096 Golden orange GFD, single paste lb. 2.58 • —
1099 Dark blue BO, single paste. lb. 2.28 • —
1101 Jade green N supra, double paste lb. 1.55 • —
1106 Blue RS, double paste lb. 3.85 • —
1113 Blue, BLFD, double paste lb. 2.92 • —
1150 Olive R, Single paste dms., dlvd. lb. 1.42 • —
1151 Brown R, single paste lb. 2.29 • —
1171 Indigo synthetic, 20% paste lb. .31 • —
1217 Orange RD, double powder. lb. 4.60 • —
p-4 Brown PG lb. 3.00 • —
p-14 Brown EB lb. 2.16 • —
p-24 Gray L lb. 2.08 • —
p-80 Diazo brilliant scarlet ROAD lb. 3.62 • —
p-202 Diazo black VJ, conc lb. 2.48 • —
p-244 Brilliant scarlet BN lb. 1.70 • —
p-313 Naphthol SWF lb. 1.60 • —
Dyes, coaltar, oil-soluble, 100-lb. drums, dlvd. No.
24 Oil orange Z-7078 lb. 1.06 • —
73 Oil scarlet BL lb. 1.70 • —
1073 Oil violet ZIRS lb. 6.81 • —
1078 Alizarine cyanine green base Z lb. 6.13 • —
1080 Oil violet special Z lb. 6.81 • —
Oil black ZBC lb. 4.46 • —
Oil black ZBD lb. 3.03 • —
Oil black ZHH lb. 4.61 • —
Dyes, coaltar, oil-soluble, 100 lb. drums, dlvd. No.
Oil black ZMM lb. 6.52 • —
Oil blue ZN lb. 8.02 • —
Oil blue ZV lb. 4.95 • —
Oil orange ZMG lb. 1.32 • —
Oil red N-1700 lb. 1.76 • —
Oil yellow ZG, conc lb. 6.33 • —
Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd. No.
p-517 Spirit yellow 2R, conc lb. 4.62 • —
p-520 Spirit orange ZR, conc lb. 5.87 • —
Spirit black RB lb. 2.95 • —
Spirit brown ZG lb. 5.30 • —
Spirit red B, conc lb. 6.41 • —

E

Echinacea root, bls lb. 1.10 • —
Egg albumin (see Albumin).
Egg yolk, dried, dom., bbls lb. 1.01 - 1.03
Tanners, bbls. lb. .06 • .06½
Elm bark, grinding, bls lb. .30 • .32
Powd., bbls., bxs. lb. .45 • —
Select, bundles lb. .75 • —
Emetine hydrochloride, USP, bots. oz.48.25 -49.00
Endrin, tech., dms., dlvd. 100% basis lb. 3.75 • —
Eosine red toner, bbls., works lb. 1.75 • —
Ephedrine, syn., USP, anhyd., bots. 100-oz. lots oz. .98 - 1.00
hydrous, bots., 100-oz lots oz. .92 • —
Ephedrine hydrochloride, tins, 100-oz. lots oz. .65 • .75
Ephedrine sulfate, cryst., tins, 100-oz. lots oz. .65 • .72
Powd., tins, 100-oz. lots oz. .66 • .73
Epichlorohydrin, dms., c.l., dlvd lb. .35½- —
dms., l.c.l., dlvd lb. .36½- —
tanks, dlvd lb. .33 • —
1-Epinephrine, base, syn., USP, bots., 100 gram lots gram. .60 • —
Epsom salt (see Magnesium sulfate).
Erigeron oil, cns lb. 5.50 - 7.50
Ergot, NF, dms., tin-lined lb. 2.00 • —
Eserine suufate, bots oz.87.75 • —
Eserine sulfate, bots. oz.87.75 • —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl. States, N. E States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .14½- .16
Ester gum, wood-rosin type, dms., c.l., same basis lb. .15 • .16
Ether (see specific product).
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld lb. .14½- —
dms., l.c.l., frt. alld lb. .15½- —
tanks, frt. alld lb. .12 • —
95-98%, dms., c.l., frt. alld lb. .14¾- —
dms., l.c.l., frt. alld lb. .15¾- —
tanks frt. alld lb. .12¼- —
99%, dms., c.l., frt. alld lb. .15 • —
dms., l.c.l., frt. alld lb. .16 • —
tanks, frt. alld lb. .12½ —
Syn., 85-88%, dms., c.l., dlvd lb. .14½- —
dms., l.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .12 • —
95-98%, dms., c.l., dlvd lb. .14¾- —
dms., l.c.l., dlvd lb. .15¾- —
tanks, dlvd lb. .12¼- —
Ethyl acetate, syn., 99%, dms., c.l., dlvd lb. .15 • —
dms., l.c.l., dlvd lb. .16 • —
tanks, dlvd lb. .12½- —
Ethyl acetoacetate, dms., c.l., dlvd. lb. .58½- —
dms., l.c.l., dlvd lb. .59½- —
tanks, dlvd lb. .56 • —
Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 • —
dms., l.t.l., dlvd lb. .37 • —
tanks, dlvd lb. .34 • —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies. gal.20.58 • —
dms., l.c.l., same basis gal.20.63 -20 69
tanks, same basis gal.20.42 • —
tax-free, dms., c.l., dlvd. E. of Rockies gal. .63 • —
dms., l.c.l., same basis gal. .68 • .74
tanks, same basis gal. .47 • —
Ethyl alcohol, absolute, 200 pf. tax paid, dms., dlvd. E. of Rockies. gal.21.70 • —
dms., l.c.l., same basis gal.21.75 -21.81
tanks, same basis gal.21.54 • —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 • —
dms., l.c.l., same basis lb. .21 • —
tanks, same basis lb. .17½- —
Ethyl benzoate, bots lb. .74 • .90

Eastman

ACIDS AND ANHYDRIDES

acetic acid
- Organic synthesis
- Reaction medium and solvent
- Dyeing assistant

acetic anhydride
- Acetylating agent
- Dehydrating agent in nitration and sulfonation reactions, etc.

propionic acid
- Ca_2 or Na salt used as bread mold inhibitor
- Raw material for herbicides

n-butyric acid
- For the preparation of butyric esters useful in formulating perfumes and flavorings

n-butyric anhydride
- Acylating agent
- Intermediate

isobutyric acid
- As a starting point for the synthesis of plasticizers, perfume materials and lacquer solvents

isobutyric anhydride
- For the preparation of aromatic esters for perfumes

2-ethyl hexoic acid
- Pb, Mn and Co salts are used as oil paint driers
- Zn and Na salts are used as emulsifying and dispersing agents

Simplify the control of your processing operations with uniformly high quality Eastman acids and anhydrides. Known as the "standard of the industry," they are your assurance of a uniform product no matter when or in what quantities they are ordered. For more information, samples or specifications, write to Eastman Chemical Products, Inc., Chemicals Division, Kingsport, Tennessee.

Eastman CHEMICAL PRODUCTS, INC.
KINGSPORT, TENNESSEE, subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee, New York City; Framingham, Mass.; Cincinnati; Cleveland; Chicago; St. Louis; Houston.
West Coast: Wilson Meyer Co., San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Ethyl Bromide—Fustic Extract

Ethyl bromide, tech., 98%, dms., c.l., frt. alld. E ..lb. .46 • —
dms., l.c.l., frt. alld E.....lb. .48 • —
tanks, frt. alld. E.....lb. .43 • —
Ethyl butyl ketone, dms., c.l., t.l., works ..lb. .36 • —
dms., l.c.l., l.t.l., works.....lb. .36¾ • —
tanks, works.....lb. .34 • —
Ethyl butyrate, works.....lb. .85 • .90
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb lots or more, works..lb. .70 • —
bgs., smaller lots, works.....lb. .72 • .80
Vis. 10, 20, 50, 100, 150 cps., bgs., 2,000-lb lots or more, works. lb. .65 • .70
bgs., smaller lots, works....lb. .67 • .81
Ethyl chloride, tech., cyls., works. lb. .20 • .22
dms., works.....lb. .18 • .20
tanks, works.....lb. .10 • —
Ethyl cinnamate, cns.....lb. 3.35 • 3.45
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E..lb. .43½- —
Ethyl ether, absolute, ACS, dms..lb. .27 • —
Anesthesia, USP, hospitals, 1-lb. cns..lb. 1.01 • —
½-lb. cns. .....lb. 1.09 • —
¼-lb. cns. .....lb. 1.21 • —
Ethyl ether, indust., dms., c.l., dlvd. lb. .12½- —
dms., l.c.l., dlvd. E.....lb. .13½- —
tanks, dlvd. E. .....lb. .10 • —
Ethyl gallate, dms., 100 to 2,000-lb. lots..lb. 3.90 • 4.40
Ethyl iodide, cbys., works.....lb. 3.30 • —

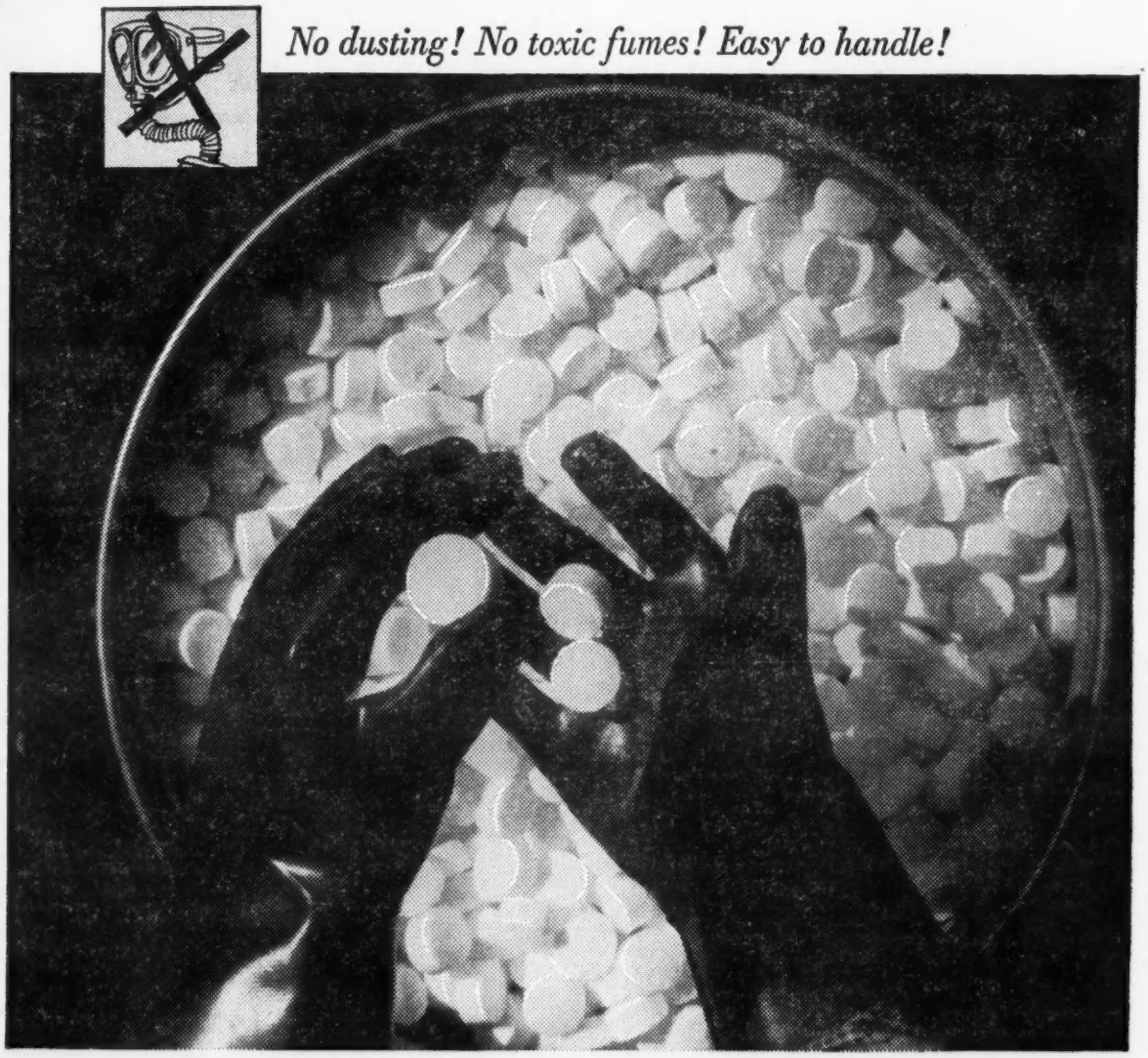
Ethyl methacrylate, dms., c.l., frt. equald..lb. .52 • —
dms., l.t.l., frt. equald.....lb. .52½- —
tanks, frt. equald.....lb. .50 • —
Ethyl morphine hydrochloride, USP, bots..oz. 11.85 • —
Ethyl nitrite (see Nitrous ether).
Ethyl oenanthate, dms. .....lb. 1.00 • 1.50
Ethyl oleate, dms., l.c.l., works lb. No prices
Ethyl oxalate (see Diethyl oxalate).
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available SiO, dms., c.l., dlvd ..lb. .44½- —
dms., l.c.l., dlvd. .....lb. .45½- —
tanks, dlvd.....lb. .42 • —
dms., l.c.l. dlvd. E.....lb. .44½- —
tanks, dlvd. E. .....lb. .41½- —
N-Ethyl-a-naphthylamine, dms., works. lb. 1.02 • —
N-Ethyl-o-toluidide, bbls.....lb. .88 • —
Ethylamine (see Mono, Di- or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 • —
dms., l.c.l., frt. alld.....lb. .58 • —
tanks, frt. alld. .....lb. .55 • —
Ethylbenzene, 99%, dms., c.l. or t.l., frt. equald ..lb. .17 • —
dms., l.c.l., same basis.....lb. .18 • —
tanks, same basis .....lb. .15 • —
2-Ethylbutyl alcohol, dms., c.l., works ..lb. .30 • —
dms., l.c.l., works.....lb. .30¾- —
2-Ethylhexyl alcohol, dms., c.l., dlvd. lb. .24¼- —
dms., l.c.l., dlvd.....lb. .25¼- —
tanks, dlvd.....lb. .21¾- —

2-Ethylhexoic acid, dms., c.l., t.l., dlvd. E..lb. .37 • —
dms., l.c.l., l.t.l., dlvd. E.....lb. .36 • —
tanks, dlvd E.....lb. .34½- —
(2-Ethylhexoic acid lc. higher W. of Rockies.)
dms., l.c.l., same basis.....lb. .25¼- —
tanks, same basis .....lb. .21¾- —
Ethylene, contract, ref'y gate, pipe line tranportation extra. lb. .0475- .0525
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis.....lb. .12½- —
tanks, same basis .....lb. .09 • —
Ethylene dichloride prices W. of Rockies, lc. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E..lb. .16 • —
dms., l.c.l., same basis.....lb. .17 • —
tanks, same basis .....lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E..lb. .22 • —
dms., l.c.l., dlvd. E.....lb. .23 • —
tanks, dlvd. E. .....lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E..lb. .21 • —
dms., l.c.l., dlvd. E.....lb. .22 • —
tanks, dlvd. E. .....lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E..lb. .19½- —
dms., l.c.l., dlvd. E .....lb. .20½- —
tanks, dlvd. E. .....lb. .17 • —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E..lb. .21 • —
dms., l.c.l., dlvd. E.....lb. .22 • —
tanks, dlvd. E. .....lb. .18½- —
Ethylene glycol monomethyl ether acetate, dms., c.l., dlvd. E..lb. .29 • —
dms., l.c.l., dlvd. E.....lb. .29¾- —
tanks, dlvd. E. .....lb. .27 • —
Ethylene glycol monostearate, triple pressed, dms...lb. .33 • .35

Ethylene oxide, dms., c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E.....lb. .24½- —
tanks, dlvd. E. .....lb. .15½- —
Ethylene trichloride (see Trichloro-ethylene).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis..lb. .42 • —
dms., l.c.l., dlvd. E., 100% basis. lb. .43 • —
tanks, dlvd. E., 100% basis..lb. .40 • —
Ethylvanillin, 100-lb. fib. dms., 500-lb. lots and over..lb. 6.40 • —
100-lb. fib. dms., smaller lots..lb. 6.65 • 6.95
Eucalyptol, USP, cns., dms .....lb. 1.25 • 1.40
Eucalyptus oil, NF, rectified, 70-80% dms..lb. .62 • —
NF, rectified, 80-90%, dms.....lb. .72 • —
Eugenol, USP, bots .....lb. 2.25 • 2.60
Euphorbia herb, bls.....lb. .15 • .17

F

F acid, crude, paste, bbls., works. lb. 2.10 • —
Feldspar, 140-200 mesh, bulk, c.l., works..ton. 19.50 • —
Feldspar in bags $3 per ton higher.
Fennel oil, sweet, USP, cns .....lb. 2.85 • —
Fennel seed, Argentine, bgs ....lb. .13½- —
Czech, medium, bgs.....lb. .09 • —
Indian, light, bgs .....lb. .15½- —
Rumanian, bgs .....lb. .09 • —
Fenugreek seed, Indian, bgs.....lb. .08½- .09
Moroccan, bgs .....lb. .08½- .09
Ferric acetate, liq., 28°, bbls., c.l., works..lb. .09 • —
bbls., l.c.l., works.....lb. .09¾- —
Soln., USP IX, cbys.....lb. .16 • —
USP IX, djns .....lb. .17 • —
Ferric chloride, anhyd., tech., dms., c.l., works..100 lbs. 7.00 • —
dms., l.c.l., works ....100 lbs. 7.85 • —
Indust., cryst., bbls., c.l., works. 100 lbs. 5.25 • 6.75
bbls., l.c.l., works.....100 lbs. 5.75 • 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 • 8.25
42° Be., sewage grade, tanks, frt. equald, 100% basis. 100 lbs. 3.75 • —
USP, cryst., dms., works.....lb. .07½- .09
Ferric citrate, gran., dms.....lb. .86 • —
Ferric hypophosphite, NF, dms..lb. 3.45 • —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld ..lb. .25¾- —
Ferric oxalate, gran., dms .....lb. .85 • .87
Ferric oxides (see Iron oxides).
Ferric phosphate, NF, soluble, gran., pearls, cs lb. .64 • .65
Ferric pyrophosphate, NF VII, soluble, powd. gran., pearls, dms., 10,000-lb. lots lb. .40½- —
Ferric resinate, 6¾% Fe., dms., frt. alld lb. .29½- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 • —
dms., l.c.l., frt. alld .....lb. .40 • .44
Ferric sulfate, partly hydrated, bgs., c.l., works..ton. 35.25 • —
bgs., l.c.l., works .....ton. 36.25 -42.25
bulk, c.l., works .....ton. 33.25 • —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms lb. .65 • .68
Green, pearls, USP XII, gran., dms lb. .66 • .69
Ferric-ammonium oxalate, fine gran., dms lb. .25½- .28¼
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33½
Ferric sodium oxalate, fine gran., dms lb. .25½- .28¼
Ferrous gluconate, NF, dms .....lb. .94 • —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 • —
dms., l.c.l., dlvd. Metropolitan area..100 lbs. 3.35 • 4.25
bbls., c.l., works .....ton. 40.00 • —
bulk, c.l., works .....ton. 27.00 • —
USP, cryst., bbls., dms.....lb. .09½- .10
Fir, balsam, Canada, cns .....gal. 32.00 -35.00
Oregon, bbls. .....gal. 3.75 • 4.00
Fir oil, Canada, cns.....lb. 4.75 • —
Fish oil, refd., alkali, dms.....lb. .1450- .1500
Kettle-bodied, dms.....lb. .1680- .1730
Light-pressed, dms.....lb. .1300- .1350
tanks .....lb. .1150- —
Fishliver oil, crude, for concentrating, 100,000 A units per gram, dms .....1,000,000 units. .14 • —
200,000 A units per gram., dms., 1,000,000 units. .13½- —
500,000 A units per gram., dms., 1,000,000 units. .16 • —
Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ton. 140.00 • —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., same basis..ton. 137.00 • —
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo-lots or more gram. 1.40 • —
10% feed grade, fib. dms., 15 kilos or more kilo. 100.00 • —
Formaldehyde, 37%, (inhibited, 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0715- —
tanks, dlvd.....lb .0450- —
37%, (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd lb. .0746 —
tanks, dlvd .....lb. .0475- —
Methanol-free (uninhibited), tanks, dlvd lb. .0420- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., l.c.l., works .....lb. .1620- .1720
90%, cbys., c.l., works.....lb. .1625- —
cbys., l.c.l., works.....lb. .1675- .1775
Fringetree bark, bls.....lb. .60 • .61
Fuller's earth, bgs., c.l., Ill. mines, ton. 19.00 • —
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines ton. 17.50 • —
calcined, bgs., c.l., same basis. ton. 20.00 -21.75
Oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton. 16.30 -17.00
200-mesh, bgs., c.l., same basis. ton. 17.50 -18.00
Spent, bgs., c.l. ship. point..ton. 4.50 • 5.00
Fumaric acid, tech., bgs., dms., c.l., frt. alld. E..lb. .27 • —
bgs., l.c.l., same basis.....lb. .28 • —
Prices of fumaric acid 1½c. per lb. higher west of Denver.
Furfural, dms., c.l., works.....lb. .13 • —
dms., l.c.l., works .....lb. .14 • —
tanks, dlvd. E. .....lb. .12 • —
tanks, dlvd. W. .....lb. .13 • —
Furfuryl alcohol, cns., works....lb. .29 • —
dms., c.l., Memphis, Tenn .....lb. .20 • —
dms., c.l., Newark, N. J.....lb. .21½- —
dms., l.c.l., Memphis, Tenn....lb. .21 • —
dms., l.c.l., Newark, N. J .....lb. .22½- —
tanks, Memphis, Tenn. .....lb. .164 • —
Fusel oil, refd., dms., c.l., dlvd..lb. .18 • —
dms., l.c.l., dlvd. .....lb. .19 • —
tanks, dlvd. .....lb. .15½- —
Fustic extract, cryst., No. 1, bbls., l.c.l..lb. .47½- —
No. 2 bbls., l.c.l. .....lb. .45½- —
No. 3, bbls., l.c.l. .....lb. .43½- —
Liq., No. 1, bbls., l.c.l. .....lb. .22½- —
No. 2, bbls., l.c.l. .....lb. .21½- —
No. 3, bbls., l.c.l. .....lb. .19 • —
Solid, No. 1, bxs., l.c.l.....lb. .45 • —



No dusting! No toxic fumes! Easy to handle!

RCI MALEIC ANHYDRIDE PELLETS

• Here is RCI MALEIC ANHYDRIDE in a most convenient form — *easy-handling pellets.* No more dusting . . . no more toxic fumes. Pelletizing of this basic material is just another example of how Reichhold offers extra service . . . service which includes technical aid available from RCI's numerous plants and sales offices across the country.

Of course, you can still order RCI MALEIC ANHYDRIDE in conventional flake form, if this suits your needs best.

In either case, you can count on the high quality of RCI MALEIC ANHYDRIDE for a very simple reason. Reichhold not only sells this material but also uses a great deal of it in manufacturing RCI synthetic resins. You'll benefit, too, from the economies realized via RCI's process of converting maleic acid to crude maleic anhydride continuously and in one step.

Write for specific information about delivery of RCI MALEIC ANHYDRIDE or any of the other basic chemicals, resins, adhesives, etc., listed with our signature.

REICHHOLD

Synthetic Resins • Chemical Colors • Industrial Adhesives
Phenol • Formaldehyde • Glycerine • Phthalic Anhydride
Maleic Anhydride • Sebacic Acid • Sodium Sulfite • Pentaerythritol
Pentachlorophenol • Sulfuric Acid

REICHHOLD CHEMICALS, INC.,
RCI BUILDING, WHITE PLAINS, N.Y.

Creative Chemistry . . . Your Partner in Progress RCI

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots..lb. 2.00 - —
bbls., smaller lots .....lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots.....lb. 1.78 - —
bbls., smaller lots .....lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld..lb. 1.50 - —
Paste, bbls., frt. alld.....lb. 1.45 - —
Gammapicoline (see g-picoline).
Garlic oil, pure, bots.....oz. 4.25 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l..lb. .53 - —
150 Bloom test, bbls., c.l..lb. .65 - —
200 Bloom test, bbls., c.l...lb. .72 - —
225 Bloom test, bbls., c.l...lb. .75 - —
275 Bloom test, bbls., c.l...lb. .82 - —
Gelsemium root, bls. .....lb. .26 - —
Gentian root, bls. .....lb. .23 - —
Grd., bbls., bxs. .....lb. .27 - —
Powd., bbls., bxs. .....lb. .27 - —
Geraniol, extra, cns., dms.....lb. 3.20 - 3.50
Standard, cns., dms. .....lb. 2.90 - 3.20
Geranium oil, Algerian, cns.....lb.14.75 - —
Bourbon, cns. .....lb.16.00 - —
Geranium oil, Turkish (see Palmarosa oil).
Geranyl acetate, cns. .....lb. 2.90 - 3.20
Ginger oil, dist., bots. .....lb.18.50 - —
Ginger oleoresin, NF, from African root, bots..lb. 4.00 - 7.75
NF, from Jamaican root, bots..lb. 6.00 -10.25
Ginger root, African, bls.....lb. .33 - —
Cochin, bgs. .....lb. .26½- —
Jamaican, No. 2, bgs.....lb. .76 - —
No. 3 bgs. .....lb. .75 - —
Nigerian, split, bgs. .....lb. .28 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, bots., works..lb. .25 - —
non-ret. dms., c.l., works..lb. .15½- —
dms., 1-dm. lots, works....lb. .16 - —
Glue, bone, extracted, dry bone, 96 jellygrams, bgs., c.l., dlvd. lb. .15 - —
104 jellygrams, bgs., c.l., same basis..lb. .17 - —
131 jellygrams, bgs., c.l., same basis..lb. .18 - —
191 jellygrams, bgs., c.l., same basis..lb. .21 - —
222 jellygrams, bgs., c.l., same basis..lb. .22 - —
Bone, green, dry bone, 40 jellygrams, bgs., c.l., same basis..lb. .13½- —
65 jellygrams, bgs., c.l., same basis..lb. .13¾- —
86 jellygrams, bgs., c.l., same basis..lb. .14 - —
115 jellygrams, bgs., c.l., same basis..lb. .14½- —
135 jellygrams, bgs., c.l., same basis..lb. .15 - —
164 jellygrams, bgs., c.l., same basis..lb. .16 - —
180 jellygrams, bgs., c.l., same basis..lb. .17 - —
200 jellygrams, bgs., c.l., same basis..lb. .18½- —
Bone glue, l.c.l., prices 1c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd..lb. .15 - —
95-121 bgs., c.l., dlvd.....lb. .16 - —
122-149, bgs., c.l., dlvd.....lb. .18½- —
150-177, bgs., c.l., dlvd.....lb. .21 - —
178-206, bgs., c.l., dlvd.....lb. .23½- —
207-236, bgs., c.l., dlvd.....lb. .26 - —
237-266, bgs., c.l., dlvd.....lb. .28 - —
267-298, bgs., c.l., dlvd.....lb. .30 - —
299-330, bgs., c.l., dlvd.....lb. .32 - —
331-362, bgs., c.l., dlvd.....lb. .34 - —
363-394, bgs., c.l., dlvd.....lb. .36 - —
395-427 bgs., c.l., dlvd.....lb. .38 - —
428-460, bgs., c.l., dlvd.....lb. .40 - —
461-494, bgs., c.l., dlvd.....lb. .42 - —
495-529, bgs., c.l., dlvd.....lb. .43 - —
Hide glue, l.c.l. prices 1c. higher.
1-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt. alld..lb. 2.00 - —
fib. dms., 25-lb. lots, frt. alld. lb. 2.05 - —
1-Glutamine, bots. .....gram, .65 - —
Glycerine, crude, nat., saponification, 88%, to refineries, tanks.. .16½- .18¼
Crude, nat., soaplye, tanks...lb. .15 - .16¾
Glycerine, refd., USP, CP, 99%, dms., c.l., dlvd..lb. .29¾- —
dms., l.c.l., dlvd .....lb. .29⅞- —
tanks, dlvd. .....lb. .27⅞- —
USP, CP, 96%, dms., c.l., dlvd. lb. .28½- —
dms., l.c.l., dlvd. .....lb. .29 - —
tanks, dlvd. .....lb. .27 - —
Refd., high gravity, dms., c.l., dlvd..lb. .29¼- —
dms., l.c.l., dlvd.....lb. .29¾- —
tanks, dlvd.....lb. .27¾- —
high gravity, yellow, dist., dms., c.l...lb. .28½- —
dms., l.c.l., dlvd.....lb. .29 - —
Glycerine, syn., dms., c.l., dlvd..lb. .29½- —
dms., l.c.l., dlvd.....lb. .30 - —
tanks, dlvd.....lb. .28 - —
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works..lb. .20½- —
dms., l.c.l., works.....lb. .21¼- —
tanks, works .....lb. .18 - —
Golden seal root, NF, tested, bls. lb. 3.85 - —
Grapefruit oil, dms.....lb. 1.50 - —
Graphite, amorph., powd., bgs., fib. dms., ex whse..lb. .06 - .09½
Cryst., 88-90%, powd., bgs., fib. dms., ex whse..lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse..lb. .21 - .24½
93-97%, powd., bgs., fib. dms., ex whse..lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse..lb. .29 - .31
Flake, No. 2, 90-95%, bgs., fib. dms., ex whse..lb. .29 - .31
Grease, white, choice, all hog, tanks, dlvd..lb. .09 - .09½
Yellow, tanks, dlvd.....lb. .07 - .07½
Grease oil, No. 1, dms., c.l.....lb. .15¾- —
dms., l.c.l.....lb. .16¾- .18¾
Extra winter, strained, dms., c.l. lb. .18¼- —
dms., l.c.l.....lb. .19¼- .21¼
Prime, burning, dms., c.l.....lb. .19¾- —
dms., l.c.l.....lb. .20¾- .22¾

Green Pigments

Green pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindella robusta herb, bls.....lb. .45 - —
Guaiacol, NF, cryst., dms., tins..lb. 2.10 - 2.15
NF, liq., cbys., dms.....lb. 2.30 - 2.40
Guaiacol carbonate, NF VII, dms.lb. 3.40 - 3.48
Guar gum, food grade, bgs.....lb. .50 - —
Tech. grade, bgs.....lb. .40 - —
Guaiacwood oil, cns.....lb. 1.60 - —

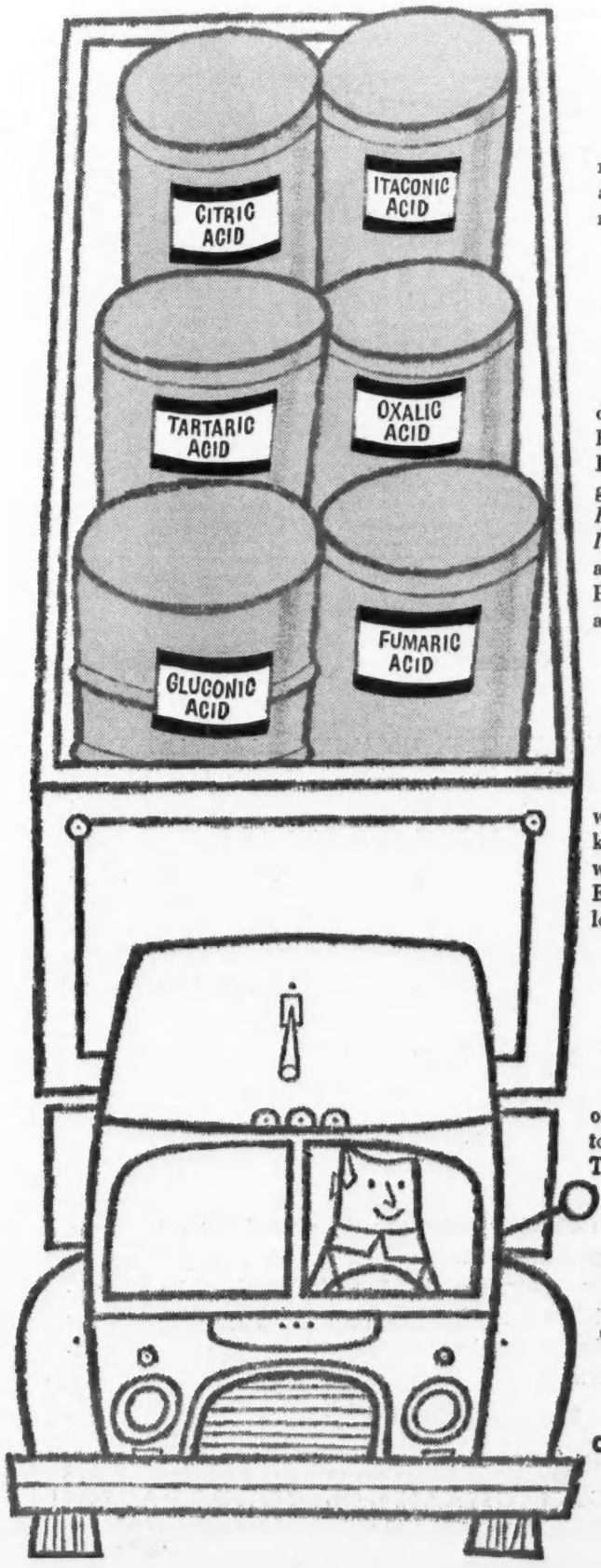
Gums

Gum quotations, formerly grouped under one heading, are now listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

Gypsum, plaster of Paris, 100-lb. paper bgs., trucks, dlvd. New York..ton.20.30 - —
Gypsum, terra alba, dom., 100-lb. paper bgs., trucks, same basis..ton.20.00 - —
100-lb. paper bgs., trucks, works, New York...ton.17.00 - —
Terra alba, imp., English, 100-lb. paper bgs., ex dock, New York..ton.55.00 - —
100-lb. paper bgs., ex whse. ton.60.00 -62.00

H

H acid, dry, bbls., c.l., frt. alld., 100% basis..lb. .90 - —
bbls., l.c.l., same basis.....lb. 1.00 - —
Hansa yellow, 10 G, bbls., same basis as yellow, chrome.lb. 2.35 - —
Hansa G pigment, bbls.....lb. 2.20 - —
Hawthorn berries, bgs.....lb. .21 - —
Heliotropin, 100-lb. lots, dms....lb. 3.00 - 3.25
Hellebore root, dom., green, bls..lb. .70 - .75
Helonias root, bls.....lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls., l.c.l..lb. .47 - —
No. 2, bbls., l.c.l.....lb. .43 - —
No. 3, bbls., l.c.l.....lb. .41 - —
No. 4, bbls., l.c.l.....lb. .39 - —
No. 5, bbls., l.c.l.....lb. .37 - —
Paste, No. 1, bbls., l.c.l.....lb. .20½- —
Hemlock oil, cns.....lb. 2.10 - 2.50
Henbane leaves, bls.....lb. .35 - .40
Heptane, indust., tanks, Bayonne, N. J. gal .20 - —
tanks, Baytown, Tex .....gal. .16¼- —
tanks, Borger, Tex.....gal. .16¼- —
Hesperidin, purif., 25 lb. lots, f.o.b., works..lb. 8.95 - —
Hesperidin methylchalcone, bots., 50-lb. lots, works..lb.22.50 - —
bots., 5-lb. lots, works .....lb.23.00 - —
bots., 1-lb. lots, works.....lb.23.50 - —
Hexachlorophene, dms.....lb. 1.94 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or New York..lb. .233 - —
bgs., 1,000-19,999-lb. lots, same basis...lb. .243 - —
Hexamethylenetetramine, tech., bgs., smaller lots, same basis. lb. .253 - —
fib. dms., 1,000-lb. lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP, bgs., 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York and Philadelphia..lb. .42½- —
bgs., smaller lots, same basis..lb. .43½- .48½
Hexane, indust., tanks, Bayonne, N. J. gal. .20 - —
tanks, Baytown, Tex.....gal. .17 - —
tanks, Borger, Tex.....gal. .17 - —
1-Hexanol, dms., c.l., works.....lb. .35 - —
dms., l.c.l., works.....lb. .35¾- —
tanks, works .....lb. .33 - —
Hexyl cinnamic aldehyde, dms..lb. 4.00 - 7.50
Hexyl salicylate, dms.....lb. 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17 - —
dms., l.c.l., dlvd .....lb. .18 - —
tanks, dlvd .....lb. .14½- —
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms., l.c.l., works .....lb. .76 - —
Hexyresorcinol, USP, dms., 50-lb. lots or more, dlvd..lb.14.00 - —
dms., smaller lots, dlvd .....lb.14.50 - —
Homatropine hydrobromide, USP, bots oz. 5.50 - —
Homatropine methylbromide, USP, bots. oz. 3.90 - —
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago..unit-ton. 6.25 - —



versatile

Do you need a sequestering agent? A reactive intermediate? A non-corrosive cleaning agent? A non-toxic acidifier? You may well be able to fill these or other needs best with one of the versatile Pfizer Organic Acids.

economical

You can order *Pfizer Citric Acid* in economical anhydrous form, which saves paying freight for water, gives better quality control. Mild *Gluconic Acid* is shipped by Pfizer as a 50 per cent aqueous solution. *Oxalic Acid* in granular and fine granular forms. *Tartaric Acid* and *Fumaric Acid* in fine granular and powdered forms. *Itaconic Acid*, a versatile polymer intermediate, now available in an economical technical grade. Check Pfizer, too, for low cost salts of citric, gluconic, oxalic and tartaric acids.

fast delivery

Pfizer has recently increased the number of modern warehouses it maintains across the country in order to keep adequate stocks of its high quality chemicals within short haul of plants everywhere—North, South, East and West. Newest of these new warehouses are located in Dallas, Texas, and Portland, Oregon.

in large tonnage

When you need a sequestering agent, an intermediate or other chemical product, check Pfizer first for large tonnage shipments. Write for further information. Pfizer Technical Service can help you with extensive data.

from **Pfizer**

Manufacturing Chemists For Over 100 Years

CHAS. PFIZER & CO., INC. *Chemical Sales Division*
630 Flushing Ave., Brooklyn 6, N. Y.
Branch Offices: Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Tex.

Horehound Herb—Juniper Wood Oil

Horehound herb, bls.....lb. .16 • .19
Hydrastis (see Goldenseal).
Hydrazine, free base, ret., dms., works..lb. No. Stocks.
Hydrazine hydrate, 85%, ret. dms., works..lb. 1.35 • 1.55
100%, ret. dms., works.....lb. 1.60 • 1.90
Hydriodic acid, 1.50 s.g., cbys....lb. 2.94 • —
1.70 s.g., cbys.....lb. 3.23 • —
Hydroabietyl alcohol, tech., solid, zone 1, dms., c.l., dlvd...lb. .29¼- —
dms., l.c.l., dlvd.....lb. .29¾- .30¼
tanks, dlvd.....lb. .27¼- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., dlvd E lb. .37 • .43
Hydrochloric acid, anhyd. (see Hydrogen chloride).
Hydrochloric acid, 18°, cbys., c.l., works 100 lbs. 2.50 • —
cbys., l.c.l., dlvd. metropolitan area 100 lbs. 2.90 • 3.05
tanks, works, frt. equald ton.28.00 • —
20°, cbys., c.l., works.....100 lbs. 2.75 • —
cbys., l.c.l., dlvd. metropolitan area 100 lbs. 3.15 • —
tanks, works, frt. equald ...ton.30.00 • —
22°, cbys., c.l., works.....100 lbs. 3.25 • —
cbys., l.c.l., dlvd. metropolitan area 100 lbs. 3.65 • —
tanks, works, frt. equald ...ton.35.00 • —

Hydrochloric acid, CP, USP, consumers, cbys., extra, c.l., works..lb.15¾- —
cbys., l.c.l., same basis.....lb. .17¼- .17¾
8-pint bots., extra, cs., c.l., same basis..lb. .20¾- —
8-pint bots., extra, cs., l.c.l., same basis..lb. .22¼- .23¼
Hydrocortisone acetate, bulk, bots., 100 grams or more..gram. 4.50 • —
Hydrocortisone alcohol, bulk, bots., 100 grams or more..gram. 4.50 • —
Hydrocyanic acid, cyls., c.l., dlvd...lb. .70 • —
cyls., l.c.l., same basis.....lb. .73 • .90
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots..lb. .40 • —
Hydrofluoric acid, anhyd. (see Hydrogen fluoride).
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs.19.25 • —
55-gal. dms., l.c.l., l.t.l., dlvd., 100 lbs.20.75 • —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 • —
20-gal. dms., l.c.l., l.t.l., dlvd. 100 lbs.22.50 • —
tanks, works, frt. equald. 100 lbs.15.50 • —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic acid, dms., works, 30% basis..lb. .06 • —
Hydrofuramide, dms., fib. ctns., works..lb. .30 • .40
Hydrogen chloride, anhyd., 50-lb. cyls., l.c., works..lb. .45 • —
50-lb. cyls., l.c.l., works.....lb. .55 • .60
Hydrogen fluoride, anhyd., cyls., dlvd. E..lb. .30½- .32½
cyls., dlvd. W.....lb. .39 • —
tanks, works.....lb. .21 • —
Hydrogen peroxide, USP, bbls., dlvd. lb. .03¾- .05
35%, dms., c.l., dlvd.....lb. .202 • —
dms., l.c.l., dlvd.....lb. .211 • —
tanks, dlvd.....lb. .1800- —
Hydroquinone, photo grade, dms..lb. 1.03 • 1.06
Tech., dms., c.l., dlvd.....lb. .82½- —
dms., l.c.l., dlvd.....lb. .84½- —
Hydroxyacetic acid, tech., 70%, nonret. bbls., Phila., 100% basis..lb. .136 • —
tanks, Belle, W. Va., 100% basis..lb. .095 • —
Hydroxycitronellal, cns.....lb. 6.00 • 7.45
Hyoscine salts (see Scopolamine).
Hioscyamine hydrobromide, bots.oz. 6.00 • 7.00
Hyoscyamine sulfate, bots.....oz. 6.75 • 7.25
Hypernic extract, cryst., No. 1, bbls., l.c.l...lb. .52 • —
Liq., No. 1, bbls., l.c.l.....lb. .35 • —
No. 2, bbls., l.c.l.....lb. .27 • —
Hydrophosphorous acid, purif., 50%, cbys..lb. 1.30 • 1.32
USP, cbys.....lb. .88 • —

I

Ichthammol, NF, dms., jars.....lb. .75 • .95
Indigo (see Dyes, coaltar, 1171 indigo, syn.).
Indole, CP, bots.....lb.16.50 -21.00
Inositol, bots., dlvd.....lb. 5.00 • —
dms., dlvd.....lb. 4.50 • 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs.....lb. 1.10 • —
Resub., USP, dms., jars.....lb. 2.30 • 2.35
Iodochlorohydroxyquinolin, USP, dms..lb. 5.90 • —
Iodoform, NF, dms., kgs.....lb. 4.90 • 5.00
a-Ionone, cns.....lb. 4.85 • —
b-Ionone, cns.....lb. 5.40 • 5.70
Ipecac root, bgs., whole.....lb. 7.50 • —
Powd., bbls., bxs.....lb. 7.85 • —
Irish moss, bleached, prime, bls..lb. .28 • .34
Iron blue, reg., bbls., c.l., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. .52 • —
bbls., l.c.l., ton lots, same basis..lb. .53 • —
bbls., smaller lots, same basis. lb. .54 • —
Iron blue, alkali-resisting, bbls., c.l., same basis..lb. .57 • —
bbls., l.c.l., ton lots, same basis. lb. .58 • —
Iron blue, alkali-resisting, bbls., smaller lots, same basis.lb. .59 • —

Iron blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Iron compounds (see Ferric or Ferrous).
Iron oxide black, pure, bgs., c.l., works..lb. .13¼- —
bgs., l.c.l., works.....lb. .13½- —
Iron oxide brown, pure, bgs., c.l., works..lb. .14¼- —
bgs., l.c.l., works.....lb. .14½- —
Iron oxide hydrated yellow, pure, bgs., c.l., works..lb. .11½- —
Iron oxide metallic brown, bgs., works..lb. .04 • —
Iron oxide metallic red, bbls., c.l., works..lb. .02½- —
bbls., l.c.l., works.....lb. .02¾- —
Iron oxide Persian Gulf red, bgs., c.l., works..lb. .07¾- —
Iron oxide red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y..lb. .12¾- —
Iron oxide red, nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley, O., Easton, Pa. bgs., c.l., works..lb. .0675- —
bgs., l.c.l., works.....lb. .08 • —
Iron oxide Spanish red, bbls., c.l. ex dock..lb. .05¾- —
bbls., l.c.l., ex dock.....lb. .06 • —
bbls., l.c.l., ex whse, New York.lb. .06½- —
bgs., l.c.l., works.....lb. .11¾- —
Iron oxide yellow, nat., French type, bgs., c.l., works..lb. .06 • —
Peruvian type, bgs., l.c.l.....lb. .0205- .0345
Isoamyl alcohol, dms., c.l., works, frt. alld. E..lb. .28 • —
dms., l.c.l., same basis.....lb. .29 • —
tanks, same basis.....lb. .25 • —
Isoborneol, cns.....lb. 1.25 • 1.70
Isobornyl acetate, cns.....lb. .46 • .70
Isobornyl formate, dms.....lb. .80 • —
Isobornyl propionate, dms.....lb. 1.15 • 1.45
Isobutyl acetate, perfume grade, cns..lb. .75 • 1.00
Solvent grade, dms., c.l., dlvd. E. of Rockies..lb. .14¾- —
dms., l.c.l., same basis.....lb. .15¾- —
tanks, same basis.....lb. .12¼- —
Isobutyl alcohol, dms., c.l., dlvd. lb. .15½- —
dms., l.c.l., dlvd.....lb. .16½- —
tanks, dlvd.....lb. .13 • —
Isobutyraldehyde, CP, dms., c.l., dlvd..lb. .27½- —
dms., l.c.l., dlvd.....lb. .28½- —
Tech., dms., c.l., dlvd.....lb. .21½- —
dms., l.c.l., dlvd.....lb. .22½- —
tanks, dlvd.....lb. .19½- —
Isoeugenol, cns.....lb. 3.45 • 3.60
Isoniazid, powd., bulk, 25-kilo lots or more..kilo.23.00 -25.50
bulk, smaller lots.....kilo.24.00 -26.00
Isonicotinic acid, 100-lb. fib. dms., works..lb. 4.25 • —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., dlvd. E. lb. .23½- —
dms., l.c.l., dlvd E.....lb. .24½- —
tanks, dlvd E.....lb. .21 • —
Isopentane, coml. grade, tanks, f.o.b. Tex. refy..gal. .15½- —
Isophorone, dms., c.l., works....lb. .24½- —
dms., l.c.l., works.....lb. .25¼- —
tanks, works.....lb. .22½- —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate,, dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., same basis.....lb. .14½- —
tanks, same basis.....lb. .11 • —
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd..gal. .53 • —
dms., l.c.l., dlvd.....gal. .60 • —
tanks, dlvd.....gal. .37 • —
Refd., 95%, c.l., dms., dlvd....gal. .55 • —
dms., l.c.l., dlvd.....gal. .62 • —
tanks, dlvd.....gal. .39 • —
Refd., 99%, dms., c.l., dlvd.....gal. .57 • —
dms., l.c.l., dlvd.....gal. .64 • —
tanks, dlvd.....gal. .41 • —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., dlvd.....lb. .07 • —
dms., l.c.l., dlvd.....lb. .08 • —
tanks, dlvd.....lb. .05 • —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), 70% in xylol, dms., c.l., t.l., works.....lb. .70 • —
dms., l.c.l., works.....lb. .714 • .814
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works..lb. .75 • —
450-lb. fib. dms., l.c.l., works....lb. .80 • .90
Isoquinoline, dms., works.....lb. .65 • 1.25
Itaconic acid, purif., fib. dms., c.l., works..lb. .54 • —
fib. dms., l.c.l., works.....lb. .55 • —
Tech., fib. dms., c.l., works....lb. .44 • —
fib. dms., l.c.l., works.....lb. .45 • —

J

J acid, paste, bbls., works, 100% basis..lb. 2.45 • —
Powd., bbls., same basis.....lb. 2.50 • 2.85
Jalap root, NF, bls.....lb. .90 Nom.
powd., bbls., bxs.....lb. 1.15 Nom.
Japan wax, cs.....lb. .43 • .44
Juniper berries, bgs.....lb. .18 • .20
Juniper berry oil, bots.....lb. 2.75 • 4.00
Twice rectified, bots.....lb. 3.60 • 7.00
Juniper tar, NF, dms.....lb. .42 • .60
Juniper tar oil, NF (see Juniper tar).
Juniper wood oil, tech., cns.....lb. .38 • .55

WIDELY USED FOR BROMINATION and as an intermediate, Hydrobromic Acid has made a place for itself in the manufacture of dyes, drugs, perfumes, sedatives, photographic emulsions and in many other fields. Michigan Chemical Corporation assures a prompt and continuous supply of HBr of guaranteed purity at a reasonable price.

HYDROBROMIC ACID

ASSAY:	48% TECHNICAL	62% TECHNICAL
Molecular Weight:	80.924	80.924
Specific Gravity at 20/4°C:	1.488	1.74
Pounds per gallon at 20°C:	12.4	14.5
HCl, not more than:	0.10%	0.15%
Vapor pressure at 30°C:		85 mm
at 50°C:		380 mm

Michigan Chemical Corporation, for more than twenty years a quality producer of chemicals, offers a series of pure bromine derivatives, among them Ethyl Bromide, Monobromobenzene, Cyclopentyl Bromide and Hydrobromic Acid, specially made for use in pharmaceutical manufacturing. Write for further information or catalog.

MC®

C-56-12
*Reg. U.S. Pat. Off.

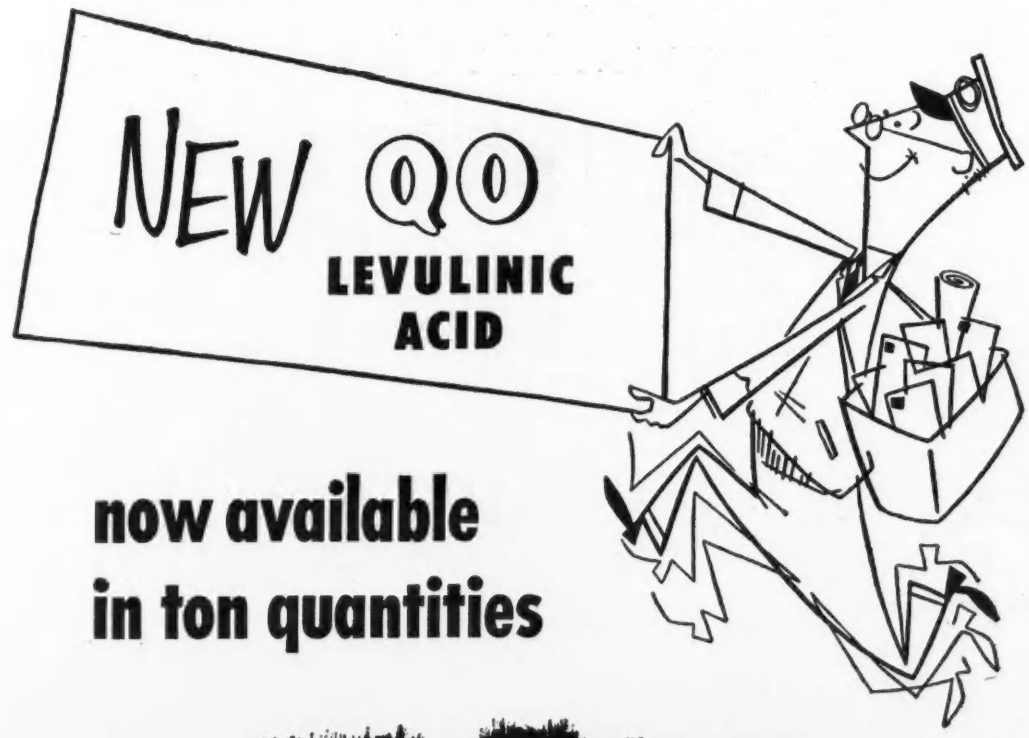
MICHIGAN CHEMICAL CORPORATION
534 Bankson Street, Saint Louis, Michigan
EASTERN SALES OFFICE: 230 Park Avenue, New York 17, New York

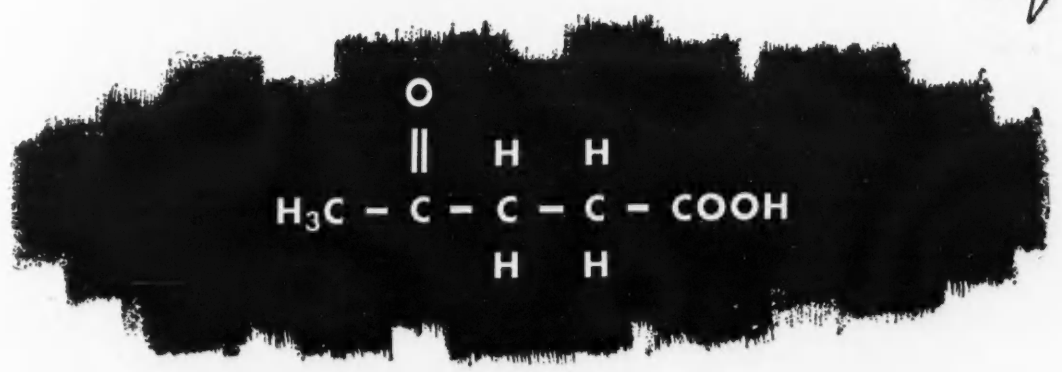
K

Kaolin see also Clay, China).
Kaolin, NF, powd., fib. dms....lb. .10 - .12
colloidal, fib. dms.....lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bbls. lb. .50 - —
No. 2, powd., bbls.....lb. .35 - .38
No. 3, powd., bbls.....lb. .32 - .35
Koch acid, bbls., frt. alld., 100% basis..lb. 1.00 - —
Kola nuts, bgs.....lb. .15 - —

L

L acid, bbls., works.....lb. 1.25 - —
Lacquer diluent, petroleum, 150°-240° F. b.r., tanks, west coast, ex tax, Los Angeles gal. .174 - —
tanks, east coast, N. J., N. Y. gal. .1525- —
Benzene type, tanks, group 3 gal. .1525- —
Toluene type, tanks group 3 gal. .14375- —
Lactic acid, edible, 50%, bbls., dms., c.l., frt. equald lb. .1780- .2100
bbls., dms., 20 or more, frt. equald lb. .1830- .2150
bbls., dms., 5 to 19, frt. equald. lb. .1880- .2200
bbls., dms., 1 to 4, frt. equald. lb. .1930- .2250
80%, c.l., bbls., dms., frt. equald. lb. .3030- .3600
bbls., dms., 20 or more, frt. equald lb. .3080- .3650
bbls., dms., 5 to 19, frt. equald. lb. .3130- .3700
bbls., dms., 1 to 4, frt. equald. lb. .3180- .3750
Plastic grade, 50%, c.l., bbls., works lb. .2100- —
bbls., 20 or more, works..lb. .2150- —
bbls., 5 to 19, works.....lb. .2200- —
bbls., 1 to 4, works .....lb. .2250- —
80%, bbls., c.l., works.....lb. .3600- —
bbls., 20 or more, works..lb. .3650- —
bbls., 5 to 19, works .....lb. .3700- —
bbls., 1 to 4, works .....lb. .3750- —
Lactic acid, tech., 22%, bbls., c.l., works, 100 lbs. 6.30 - —
bbls., l.c.l., works ....100 lbs. 6.70 - —
44%, bbls., c.l., works....100 lbs.11.95 - —
bbls., l.c.l., works .... 100 lbs.12.35 - —
USP, 85%, cyls.....lb. .85 - .88
Lactose, edible, bgs., 23,000-lb. lots, frt. equald lb. .14 - —
bgs., 6,000-lb. lots, frt. equald.lb. .14½- —
bgs., 2,000-lb. lots, frt. equald.lb. .14¾- —
bgs., 200-lb. lots, frt. equald lb. .15¼- —
Edible lactose in fib. dms., ½c. higher.
Lactose, ferment. grade, bgs., c.l., works lb. .08½- —
USP, fib. dms., 30,000-lb. lots, frt. equald. lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald. lb. .22¼- —
fib. dms., 200-1,800-lb. lots, frt. equald..lb. .22¾- —
USP lactose in bgs., ½c. to 1c. lower.
Ladyslipper root, bls.....lb. No stocks.
Lake C red toner, alizarine, bbls., works..lb. 1.20 - —
Lamp black, bgs., c.l., works .....lb. .16 - .45
Lanolin, cosmetic, dms., works..lb. .27 - .29
USP, anhyd., mds., works.....lb. .24 - .26
hydrous, dms., works.....lb. .23 - .25
Lard, cash, dms., Chicago.....lb. .14½- —
Lard oil (see Grease oil).
Larkspur seed, bgs.....lb. .25 - —
Laurel leaf oil, dms., cns.....lb. 9.75 -12.50
Laurent's acid, bbls.....lb. .60 - —
Lauric acid, 90%, dms.....lb. .35¾- .37¾
Lauryl alcohol, bots .....lb. 2.00 - 2.50
Lauryl alcohol, bots.....lb. 2.00 - 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works..lb. .65½- —
dms., l.t.l., dms., works.....lb. .68 - —
Lavender flowers, medium, bls..lb. .75 - .80
Ord., bls.....lb. .25 - .40
Select, bls.....lb. .90 - —
Lavender flower oil, perfume grade, USP, French, 35-37% ester, cns..lb. 5.50 - —
Perfume grade, USP, French, 38-40% ester, cns.....lb. 7.50 - —
40-42% ester, cns.....lb. 9.00 - —
Spike, Spanish, cns .....lb. 2.60 - —
Lavandin oil, dms., cns.....lb. 2.55 - 2.95
Lead acetate, NF, cryst., gran., powd..lb. .36½- —
White, cryst., bbls.....lb. .25½- —
gran., bbls.....lb. .26½- —
powd., bbls.....lb. .26½- —
Lead arsenate, acid powder, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more..lb. .27½- —
3-lb. bgs. or larger, l.c.l., frt. alld..lb. .28½- —
1-lb. bgs., c.l. .....lb. .41½- —
1-lb. bgs., l.c.l. .....lb. .42½- —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld..lb. .17¼- —
bbls., l.c.l., same basis.....lb. .18¼- —
Lead carbonate (see Lead, white, basic cabonate).
Lead chloride, dms.....lb. .45 - —
Lead iodide, NF V, jars.....lb. 3.82 - —
Lead linoleate, fused, 26% Pb, dms. lb. .33 - —
Lead metal, pigs, prime, New York. lb. .16 - —
St. Louis .....lb. .1580- —
Lead monosilicate, bgs., c.l., works, frt. equald..lb. .20 - —
bgs., l.c.l., same basis.....lb. .2075- —
Lead naphthenate, liq., 16% Pb, dms., dlvd..lb. .17 - —
24% Pb, dms., dlvd .....lb. .21 - —
Solid, 37% Pb, dms., dlvd.....lb. .27½- —
Lead nitrate, bbls.....lb. .23¾- —
Lead orthosilicate-gel, 50-60% PbO_2 dms., works..lb. .29¾- .34¼
Lead peroxide, tech., powd., bbls lb. .38¾- .40¼
Lead phthalate, dibasic, dms., works. lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. alld....lb. .18¼- .19
bbls., l.c.l., same basis.....lb. .19¼- .20
97% Pb_3O_4, bbls., c.l., same basis. lb. .1845- .192
bbls., l.c.l., same basis.....lb. .1945- .202
98% Pb_3O_4, bbls., c.l., same basis. lb. .1935- —
bbls., l.c.l., same basis.....lb. .2035- —
Lead resinate, precip., 23% Pb, dms., dlvd..lb. .32½- —
Lead salicylate, normal, dms., works. lb. .46 - —
Lead silicate, (see Lead, white, basic silicate).
Lead sulfate (see Lead, blue, basic sulfate).
Lead tallate, liq., 16% Pb, dms...lb. .15 - —
24% Pb, dms. .....lb. .18½- —
Solid, 30% Pb, dms. .....lb. .23¼- —
Lead, white, basic carbonate, bgs., c.l., shipt. pt., frt. alld. lb. .19 - —
bgs., l.c.l., same basis.....lb. .20 - —
Lead, white, basic, silicate., bgs., c.l., shipt. pt., frt. alld..lb. .17¼- —
bgs., l.c.l., same basis.....lb. .18¼- —
Lead, white, basic sulfate, bgs., c.l., shipt. pt., frt. alld..lb. .17¼- —
bgs., l.c.l., same basis.....lb. .18¼- —
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works. lb. .14 - .15
non-ret. dms., l.c.l., same basis..lb. .16 - .17
Edible, tech., unbleached, non-ret. dms., c.l., same basis..lb. .13 - .14
non-ret. dms., l.c.l., same basis..lb. .15 - .16
Lemon bioflavonoid complex, fib. dms., 25-lb. lots, works..lb. 9.00 - —
Lemon oil, terpeneless, bots.....lb.50.00 -85.00
USP, Calif., cns., dms.....lb. 4.00 - 5.00
Messina, cns.....lb. 5.75 - —
Lemongrass oil, cns., dms.....lb. 1.40 - —
dl-Leucine, dms., works.....lb.12.25 -15.00
Licorice root, gran., bls. .....lb. .15 - .17
Powd., bls. .....lb. .12 - .15
Whole, bls. .....lb. .10 - .12
Lignaloe wood oil, Mexican, cns..lb. 4.65 - 5.00
Lignosulfonate, 70% tannin, bgs., c.l., works..lb. .06½- —
bgs., l.c.l., works.....lb. .06¾- —
Lime, chemical (quicklime), bulk, c.l., metropolitan New York destination, freight equalized with nearest producing pt..ton.20.82 - —
Hydrated, bulk, c.l., same basis. ton.22.32 - —
Spray, bgs., c.l., same basis..ton.26.32 - —
Lime oil, dist., Mexican, cns....lb. 5.00 - 5.25
West Indian, cns. .....lb. 5.00 - —
Expressed West Indian, cns....lb. 6.00 - 8.00
Terpeneless, bots. .....lb.50.00 -85.00
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Limestone grd., bgs., works..ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 3.65 - 4.80
Ex linaloe wood oil, dms.....lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms..lb. 3.30 - 5.10
96-98%, dms. .....lb. 4.05 - 6.75
Ex petitgrain, bots. .....lb. 4.80 - 5.90
Lindane, 25% formulation, dealers, dms., frt. alld..lb. 1.58 - 1.68
99%, tech., formulators, dms., frt. alld..lb. 2.65 - 3.25
Linden flowers, with leaves, bls..lb. .25 - —
Without leaves, bls. .....lb. .30 - —
Linseed meal, expeller, 32-34% bulk, Midwest mills..ton.59.00 - —
Extracted, 36%, bulk, same basis. ton.59.00 - —
Linseed oil, raw, dms., c.l., New York..lb. .1600- —
dms., l.c.l.....lb. .1700- .1725
tanks, f.o.b. Minneapolis.....lb. .1270- —
tanks, New York.....lb. .1410- —
tankwagon, New York.....lb. .1440- .1450
Boiled linseed oil, .006c. per lb. higher.
Linseed oil acids, dist., dms.....lb. .1900- —
Water-white, dms.....lb. .2200- —
Linseed pitch, dms. .....lb. .06 - .06¾
Litharge, coml., powd., bbls., c.l., works, frt. equald..lb. .17¾- .18
bbls., l.c.l., same basis.....lb. .18¾- .19
Lithol red toner, bbls., works..lb. .93 - —
Lithol-rubine red toner, pure bbls., works lb. 1.50 - —
Resinated, bbls., works.....lb. 1.40 - —
Lithium benzoate, dms. .....lb. 1.65 - 1.67
Lithium bromide, NF, dms., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms., c.l., t.l., dlvd lb. 1.29½- —
dms., ton lots to t.l., dlvd lb. 1.30 - 1.30½
Tech., dms., c.l., t.l., dlvs., frt. alld works lb. .82 - —
dms., l.c.l., same basis .....lb. .85 - 1.11½
Lithium chloride, CP, anhyd., ton lots lb. 1.23½- —
Tech., anhyd., dms., c.l., t.l., dlvd. or works, frt. alld. lb. 1.00 - 1.03
dms., l.c.l., same basis... lb. 1.05 - 1.05½
Lithium citrate, NF, dms. .....lb. 1.60 - 1.64
Lithium fluoride, bbls., 10,000-lb. lots, dlvd..lb. 2.17½- —
bbls., ton lots, dlvd. .....lb. 2.18½- —
bbls., less ton lots, dlvd. .....lb. 2.23½- —
Lithium hydride, powd., dms., 500-lots, works lb.10.50 -12.50
Lithium hydroxide, monohydrate, dms., dlvd lb. .78 - —
Lithium manganite, dms., works lb. .95 - 1.15
Lithium nitrate, tech., dms., 100-lb. lots..lb. 1.25 - —
Lithium salicylate, dms.....lb. 1.60 - 1.70
Lithium silicate, dms., works....lb. 1.10 - 1.30
Lithium stearate, dms., c.l., works. lb. .47½- —
dms., ton lots, works.....lb. .48½- —
dms., less-ton lots, works.....lb. .53½- —





The Quaker Oats Company now offers QO levulinic acid—a new versatile raw material for the chemical industry. Now available in drums from our pilot plant, production will be expanded to meet industry's needs. This versatile chemical can undergo the reactions of a ketone and an acid; it is unusual in that each of its three methylene groups is situated next to a carbonyl group.

WRITE US for a copy of our Bulletin on QO levulinic acid and a sample of this new product

The Quaker Oats Company CHEMICALS DEPARTMENT QO CHEMICALS

The Quaker Oats Company
CHEMICALS DEPARTMENT
341M The Merchandise Mart, Chicago 54, Illinois
Room 541M, 120 Wall Street, New York 5, New York
Room 441M, 48 S.E. Hawthorne Blvd., Portland 14, Oregon

Lithium sulfate, dms., 100-lb. lots. lb. 1.15 • —
Lithium titanate, dms., works....lb. 1.15 • 1.35
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08⅜- —
bgs., l.c.l., dlvd E.....lb. .09⅛- —
Titanated (high-strength), bgs., c.l., dlvd..lb. .11 • —
bgs., l.c.l., dlvd.....lb. .12 • —
Lobelia herb, bls. .....lb. 1.50 • —
Lobeline sulfate, bots., works..oz. .37.50 -38.50
Locust bean gum, powd., bgs ...lb. .50 • —
Logwood extract, cryst., No. 1, bbls., l.c.l..lb. .41 • —
No. 2, bbls., l.c.l. .....lb. .39 • —
Liq. No. 1, bbls., l.c.l. .....lb. .20 • —
No. 2, bbls., l.c.l. .....lb. .19 • —
No. 3, bbls., l.c.l. .....lb. .18½- —
Solid, No. 1, boxes, c.l. .....lb. .35 • —
Lycopodium, cs. .....lb. 3.50 • —
dl-Lysine monohydrochloride, fib. dms lb. 12.00 • —
l-Lysine monohydrochloride, fib. dms..lb. 12.00 -13.00

M

Mace, Siauw, siftings, bls .....lb. 3.25 • —
West Indian, No. 1, bls., shipment..lb. 3.25 • —
Mace oil, dist., cns., dms.....lb. 14.00 • —
Magnesia, calcined, tech., bgs., ctns., frt. equald..lb. .25¾- .26½
Magnesia, syn., rubber grade, light, bgs., c.l., frt. equald..lb. .29¾- .30½
rubber grade extra light, bgs., c.l., frt. equald..lb. .29¾- —
bgs., l.c.l., frt. equald...lb. .30½- —
USP, light, bgs. .....lb. .36½- .37½
heavy, fib. dms. .....lb. .45 • .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt. equald..ton. 82.50 • —
Magnesite, chemical grade, dead-burnt, standard grain, bulk, c.l., Chawelah, Wash..ton. 46.00 • —
Magnesium bromide, cs., jars....lb. .95 • 1.00
Magnesium carbonate, tech., bgs., c.l., frt. equald..lb. .10½- —
bgs., t.l., frt. equald.....lb. .11 • —
bgs., l.c.l., frt. equald.....lb. .12½- .13½
Magnesium carbonate, USP, bgs., c.l., frt. equald..lb. .13 • —
bgs., t.l., frt. equald.....lb. .13½- —
bgs., l.c.l., frt. equald.....lb. .14½- .15½

Above prices are quoted f.o.b. works, freight equald, with metropolitan New York and competitive producing points.

Magnesium chloride, anhyd., 92% flake or pebble, dms., c.l., works..lb. .12¾- —
dms., l.c.l., works.....lb. .14 • .15
Hydrous, 99% flake, bgs., c.l., works..ton. 55.00 • —
bgs., l.c.l., works.....ton. 65.00 -80.00
Magnesium gluconate, dms., cns..lb. 1.34 • 1.41
Magnesium hydroxide, NF, powd., bbls., dms., kgs.....lb. .23½- .27
Magnesium metal, 99.8% ingots, 10,000-lb. lots or more, works..lb. .36 • —
Pigs, 10,000-lb. lots or more, works..lb. .35¼- —
Sticks, cs., works, frt. alld. on carlots..lb. .59 • —
Magnesium oxide (see Magnesia, calcined).
Magnesium nitrate, cryst., dms., works..lb. .29 • —
Magnesium peroxide, 15%, dms., works..lb. 1.00 • 1.05
Magnesium phosphate tribasic, NF, bbls..lb. .75 • —
Magnesium silicate (see Talc).
Magnesium silicofluoride, dms., works..lb. .10½- .12
Magnesium sulfate, tech., bgs., c.l., works..100 lbs. 2.15 • —
bgs., l.c.l., works.....100 lbs. 2.90 • 3.15
Magnesium sulfate, USP, cryst., bgs., c.l., works..100 lbs. 2.35 • —
bgs., l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 3.10 • —
bgs., smaller lots ....100 lbs. 3.35 • —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots..lb. .38 • —
fib. dms., 1,000-lb. lots.....lb. .40 • —
fib. dms., 100-lb. lots.....lb. .45 • —

Prices on maleic anhydride W. of Rockies, 1½c. per lb higher.

Malachite green, straight, PTMA, bbls., works..lb. 5.30 • —
Malathion, dms., c.l., works.....lb. .90 • —
dms., l.c.l., works.....lb. .92 • 1.02
Maleic acid, cryst., powd., dms..lb. .37 • .38
Maleic anhydride, dms., c.l., dlvd. E..lb. .28½- —
dms., l.c.l., dlvd. E.....lb. .29½- —
tanks, dlvd. E.....lb. .27½- —

Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.

Malic acid, tech., dms.....lb. .50 • —
Mandelic acid, NF, dms., 1,000-lb. lots. lb. 2.35 • —
dms., smaller lots.....lb. 2.40 • 2.50
Mandrake root, bls.....lb. .55 • .60
Manganese acetate, bbls., dlvd..lb. .35 • —
Manganese arsenate, bgs. .....lb. .16 • —
Manganese borate, tech., fib. dms. lb. .25 • —
Manganese carbonate, bbls., works. lb. .22 • —
Manganese chloride, anhyd., dms., works lb. .25½- —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net, works ton. 148.00 • —
40,000 to 99,999-lb lots, paper bgs., same basis ...ton. 144.50 • —
40,000 to 99,999-lb. lots, dms., same basis..ton. 152.50 • —

Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.

Manganese gluconate, dms.....lb. 1.80 • 1.94
Manganese hydrate, bbls., dlvd..lb. .36 • —
Manganese hypophosphite, NF, dms. lb. 3.52 • —
Manganese linoleate, liq., 4.35% Mn, dms..lb. .32½- —
Solid, precip., 8.2% Mn, bbls. lb. .37½- —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld..lb. .27 • —
Manganese resinate, fused, 3½% Mn, dms. lb. .24 • —
Precip., 6½-7% Mn, dms.....lb. .28 • —
Manganese sulfate, fertilizer grade, 65% Mn, bgs., c.l., dlvd. S.E. ton. 88.55 • —
bgs., l.c.l., dlvd. S.E .....ton. 95.55 • —
Manganese tallate, 6% Mn, dms.....lb. .24 • —
Mangrove bark, E. African, 38% tannin, bgs., c.l., ex dock, ton. 62.00 • —
South American, 30% tannin, bgs., c.l., ex dock..ton. 54.00 -57.00
Manila copal gum, C, bgs.....lb. .34¾- .38
CBB, bgs.....lb. No. stocks.
DBB, bgs.....lb. .25½- .28
DK, bgs.....lb. No stocks.
DK, dust., bgs.....lb. .14 Nom.
MA, soft, bgs.....lb. .19¾- .22
WS, bgs.....lb. No stocks.
Mannitol, com'l, fib. dms., ton lots, works..lb. .60 • —
fib. dms., to ton lots, works..lb. .62 • —
fib. dms., single dm., works..lb. .65 • —
Marine pitch, dms.....lb. .04¼- .05
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works.....lb. .30 • —
bgs., l.c.l., works.....lb. .31 • —
Menadione, USP, bots.....gram. .044 • .05
Menhaden oil, crude, tanks, works, Atl. & Gulf..lb. .08¼ Nom.
Menthol, nat., USP, Brazilian, cs..lb. 6.25 • 6.50
Syn., USP, racemic, cns .....lb. 4.50 • —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld..lb. .42 • —
bgs., fib. dms., less ton lots, same basis lb. .44 • —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld..lb. .52 • —
bgs., fib. dms., less ton lots, same basis..lb. .54 • —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 • —
NF, gran. or powd., dms., 50-lb. lots or more lb. 4.78 • —
Mercuric cyanide, NF, VIII, powd., fib. dms lb. 6.84 • —
Mercuric iodide, red, NF, fib. dms. lb. 7.72 • —
Mercuric oxide red, NF, powd., fib. dms..lb. 5.97 • 6.01
Tech., c.l., works.....lb. 5.77 • —
Mercuric oxide yellow, bbls., 1,000-lb. lots..lb. 5.58 • —
bbls., smaller lots.....lb. 5.60 • —
USP, fib. dms.....lb. 6.14 • —
Mercurous chloride (see Calomel).
Mercurous iodide yellow, NF.... lb. 7.72 • —
Mercury, ammoniated (see White precipitate, USP).
Mercury metal, 76 lb. per flask. net-flask. 255.00 -257.00
Mesityl oxide, dms., c.l., dlvd....lb. .14 • .14½
dms., l.c.l., dlvd.....lb. .15 • .15½
tanks, dlvd.....lb. .11½- .12
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works.....lb. .57 • .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, works..lb. .47 • —
dms., smaller lots, works..lb. .47½- .80
tanks, works.....lb. .45 • —
Methanol, nat., denaturing grade, tanks, frt. alld..gal. .85 • —
Syn., zone 1, dms., c.l., or t.l. min., frt. alld. or dld..gal. .48½- —
dms., l.c.l., works.....gal. .55½- —
tankwagon, 2,000-4,000 gal. lots, dlvd. metropolitan area..gal. .35½- —
tankwagon, 4,000 gal., min., frt. alld. or dlvd..gal. .32½- —
tankwagon, 4,000 gal. min., works, Carteret, Camden, N. J..gal. .29½- —
Syn., zone 2, dms., c.l., or t.l. min. frt. alld. or dlvd..gal. .31½- —
dms., l.c.l., works.....gal. .58½- —
tankwagon, 2,000-4,000-gal. lots., min., dlvd. metropolitan areas..gal. .38½- —
tanks, 4,000 gal., min., frt. alld. or dlvd..gal. .35½- —

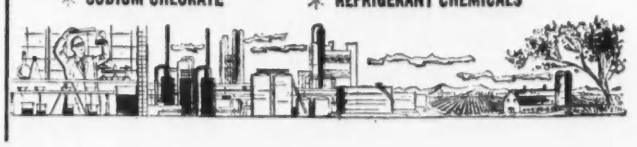
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah, Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 • —
Feed grade, 98%, fib. dms., same basis lb. 2.65 • —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt. alld..lb. .61 • .64
Methyl abietate, non-ret. dms., c.l., dlvd, zone 1..lb. .20½- —
Non-ret. dms., l.c.l., same basis lb. .21 • —

Reserved for you... Mr. Chemical Engineer!

Fact-packed, basic and vital... now in one handy volume all you want to know about TRONA's diversified chemicals by the pound for research or by the ton for production.

- BORON CHEMICALS
- SODA ASH
- SALT CAKE
- POTASH SALTS
- LITHIUM CHEMICALS
- BROMINE CHEMICALS
- SODIUM CHLORATE
- POTASSIUM CHLORATE
- POTASSIUM PERCHLORATE
- AMMONIUM PERCHLORATE
- MANGANESE DIOXIDE
- INSECTICIDES
- FUMIGANTS
- REFRIGERANT CHEMICALS



SEND FOR YOUR COPY TODAY. *No user of basic chemicals should be without this valuable products catalog. A request on your company letterhead will be answered promptly.*

American Potash & Chemical Corporation TRONA

WEST SIXTH AT WESTMORELAND • LOS ANGELES 54, CALIFORNIA

LOS ANGELES • NEW YORK • ATLANTA • SAN FRANCISCO • PORTLAND, ORE. | *Export Division:* 99 Park Avenue, New York 16, New York

Methyl abietate, hydrogenated non-ret. dms., c.l., dlvd., zone 1..lb. .21 • —
Non-ret. dms., l.c.l., same basis lb. .21½- —

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala. Ga.; Fla., S. C. and Tenn.

Methyl acetone, nat., dms., l.c.l., E. of Miss., frt. alld..gal. .62½- —
Syn., dms., c.l., frt. alld. E..gal. .63½- —
dms., l.c.l., frt. alld. E.....gal. .69½- —
tanks, frt. alld. E.....gal. .48½- —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate, dms., c.l., t.l., dlvd. lb. .39 • —
dms., l.t.l., dlvd. .....lb. .40 • —
tanks, dlvd. .....lb. .37 • —

Methyl alcohol (see Methanol).

Methyl amyl acetate, dms., c.l., dlvd. E..lb. .16½- —
dms., l.c.l., dlvd. E.....lb. .17½- —
tanks, dlvd. E .....lb. .14 - —

Methylamyl alcohol (see Methyl isobutyl carbinol).

Methylamyl ketone, dms., works lb. 1.05 • —
Methyl anthranilate, cns. .....lb. 2.35 - 2.65
Methyl benzoate, cns., dms. .....lb. .60 - .75

Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .65

Methyl cellulose, special vis. (1,500-4,000 cps.) 50-lb. bgs., c.l., works. lb. .82 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .89 • —
50-lb. bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 • —

Standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld... lb. .69 • —
50-lb. bgs., 2,000-lb. lots and more, same basis lb. .76 • —
50-lb. bgs., smaller lots, frt. alld. on 100-lbs..lb. .79 - .89

Methyl chloride, indust., cyls., frt. equald..lb. .22¼- —
tanks, multi-unit, same basis, lb. .16¼- —
tanks, single unit, same basis, lb. .12¾- —
Refrigerator mfrs., cyls., dlvd..lb. .48¾- —
other consumers or service men,, cyls., dlvd..lb. .67¾- —

Methyl chloroform (see 1,1,1-trichloroethane).

Methyl cinnate .....lb. 1.53 - 1.80

Methyl ethyl ketone, dms., c.l., dlvd..lb. .14½- —
dms., l.c.l., dlvd.....lb. .15½- —
tanks, dlvd. .....lb. .12 • —

Methyl formate, refd., dms.....lb. .35 - .40
Tech., non-ret. dms., any quantity.. works..lb. .10 • —

Methyl heptin carbonate, bots..lb.31.00 -42.00

Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00

Methyl ionone, standard, cns., dms. lb. 4.85 • —

Methyl isobutyl carbinol, dms., c.l., dlvd..lb. .16½- —
Dms., l.c.l., dlvd.....lb. .17½- —
tanks, dlvd. .....lb. .14 • —

Methyl isobutyl ketone, dms., c.l., dlvd..lb. .16½- —
dms., l.c.l., dlvd.....lb. .17½- —
tanks, dlvd. .....lb. .14 • —

Methyl methacrylate, dms., c.l., t.l., frt. equald, with Belle, W. Va..lb. .31 • —
dms., smaller lots, same basis..lb. .31½- —
tanks, same basis .....lb. .29 • —

Methyl naphthyl ketone, cryst., cns. lb. 3.00 - 4.30

Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).

Methyl roseaniline chloride, NF., 5-lb. fib. dms lb. 6.90 • —

Methyl salicylate, USP, cns., 500-lb. lots lb. .62 • —

Methyl testosterone, USP, 100-gram bots .gram. .68 • —

Methyl violet toner, molybdated, PMA, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 2.80 • —

Methyl violet toner, tungstated, PTMA, bbls., same basis..lb. 4.35 • —

Methyl violet toner dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald, with Chicago.

2-Methylbenzylamine, dms., l.c.l., works lb. 1.25 • —
2-Methylbenzyl dimethylamine, dms., c.l., works..lb. 1.89 • —
dms., l.c.l., works .....lb. 1.90 • —
2-Methyl-5-ethyl pyridine, dms., c.l., works. lb. .445 • —
dms., l.c.l., works .....lb. .45 • —
tanks, works .....lb. .43 • —

Methylene blue, fib. dms., 100-lb. lots, frt. adjusted.....lb. 3.25 • —

Methylene chloride, tech., dms., c.l., t.l., straight or mixed works..lb. .14 • —
dms., l.c.l., l.t.l., works.....lb. .16¾- —
tanks, 4,000-gal. min., tank trucks, max. load limit works lb. .12½- —
tank trucks, 1,000-gal. min., works lb. .13½- —

b-Methylnaphthalene, 32°C., m.p., dms., works .lb. .90 • —

Methylpentanediol (see Hexylene glycol).

Methylphenylpyrazolone (see 1-phenyl-3-methylipyrazolone-5).

Methylthionine chloride (see Methylene blue).

Mica, dry-grd., paint plastic, 100 mesh, bgs., c.l., works .lb. .04 • —
roofing, 20 to 80 mesh, works lb. .03 • —
Wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½- —
bgc., l.c.l., ex-whse. .....lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E. lb. .08¼- —
bgs., l.c.l., ex-whse or frt. alld. E lb. .09 • —
rubber, bgs., c.l., works, frt. alld. E lb. .08 • —
bgs., l.c.l., ex-whse. or frt. alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾- —
bgs., ex-whse. or frt. alld. E. lb. .09 • —
Mica, wet-grd., white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
bgs., l.c.l., ex-whse. or frt. alld. E..lb. .09 • —

Mica, wet-grd. W. of Miss. ½c. higher; W. of Rockies 1c. higher.

Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works..lb. .11 - .12

Mineral black, bgs., works.....lb. .0160- .0673

Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. New York..gal. .59 • —
Tech., 65-75 vis., non-ret. dms., c.l., same basis..gal. .60 • —
non-ret. dms., l.c.l., same basis..gal. .68 • —
80-90 vis., non-ret. dms., c.l., same basis..gal. .61 • —
non-ret. dms., l.c.l., same basis..gal. .68 • —
135-138 vis., non-ret. dms., c.l., same basis..gal. .67 • —
non-ret. dms., l.c.l., same basis..gal. .77 • —
145-155 vis., non-ret. dms., c.l., same basis gal. .73½- —
non-ret. dms., l.c.l., same basis gal. .80½- —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .75 • —
non-ret. dms., l.c.l., same basis gal. .82 • —
Mineral oil, white, USP, 200-210 vis., non-ret. dms., l.c.l., f.o.b. New York gal. .83 • —
non-ret. dms., l.c.l., same basis gal. .90½- —

Mineral orange, American, bbls., l.c.l., works .lb. .2235- —

Mineral spirits, petroleum, odorless, tanks, refy., Watson, Calif. gal. .25 • —
tanks, Borger, Tex.....gal. .25 • —
Houston, Tex. .....gal. .25 • —
Philadelphia .....gal. .32 • —
Newark, dlvd. .....gal. .3328- —
New York, dlvd. .....gal. .34½- —
Wood River, Ill. .....gal. .2725- —
tankwagon, New Jersey, dlvd. gal. .37½- —
tankwagon, New York, dlvd. gal. .38½- —

Mineral spirits, petroleum, reg., tanks, Calif., ex tax San Francisco..gal. .169 • —
tanks, east coast New Jersey, New York..gal. .18 • —
tanks, group 3 .....gal. .12875- —
tankwagon, Boston.....gal. .20 • —
Buffalo .....gal. .20½- —
Chicago .....gal. .289 • —
Cleveland .....gal. .23½- —
Newark .....gal. .19 • —
New York .....gal. .19 • —
Philadelphia .....gal. .19½- —
Pittsburgh .....gal. .19 • —
Providence .....gal. .20½- —

Mirbane oil (see Nitrobenzene).

MNPT maroon toner, kgs., c.l., works .lb. 6.30 • —

Molasses, blackstrap, feed grade, tanks, New Orleans..gal. .24 • .25
tanks, New York .....gal. .28 • —

Molybdated orange, bbls..... lb. .48 • —

Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 • —
325 mesh, ctns., works.... kilo. 9.13 • —

Molybdenum trioxide, pure, dms., works lb. 1.15 • —
Tech., dms., works, basis Mo content lb. 1.39 • —

Molybdic acid, 85%, dms., works.lb. 1.20 • —

Monobutylamine, dms., c.l., E. of Rockies lb. .55½- —
dms., l.c.l., same basis..... lb. .56½- —
tanks, same basis .....lb. .53 • —

Monochloracetic acid, purif. (see Chloroacetic acid, mono).

Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .10 • —
dms., l.c.l., same basis..... lb. .11 • —
tanks, same basis.....lb. .08½- —

Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis.....lb. .28½- —
tanks, same basis.....lb. .25 • —

Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).

Monoethylamine, 70% contained amine, dms., c.l., dlvd. E. lb. .37½- —
dms., l.c.l., dlvd. E ..... lb. .38½- —
tanks, dlvd. E ..... lb. .35 • —

Monoethylaniline (see N-Ethylaniline).

Monoethylorthotoluidin (see N-Ethyl-o-toluidine).

Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
dms., l.c.l., same basis.....lb. .28½- —
tanks, same basis.....lb. .25 • —

Monoisopropylamine, dms., c.l., dlvd. lb. .32½- —
dms., l.c.l., same basis..... lb. .33½- —
tanks, same basis ..... lb. .30 • —

Monomethylamine, 30-35% soln., dms., c.l., frt. equald, 100% basis lb. .40 • —
dms., l.c.l., frt. equald, 100% basis lb. .40½- —
tanks, frt. equald, 100% basis. lb. .31 • —

DOW

"Locked in the Versene claw"—that's the fate of metal ions when they encounter chelating agents. They become trapped within the inner ring structure of a newly formed compound where they cannot hinder processing or mar product quality. This phrase is taking on new meaning for many industries, as the chemistry of chelation is reviewed.

The Chemistry of Chelation: Part IV

Applications in specific industries · Synthetic rubber manufacture
Soaps and synthetic detergents · Textile processing · A new kind of chemistry?

As has been discussed previously, the Versene® series and Versenol® series chelating agents will inactivate practically all metal ions they contact in solution. The pH of the solution or of the finished product influences the choice of agent. To control iron in caustic solutions, look to Versene T®; in alkaline solutions—Versene Fe-3 Specific®; in acid solutions—the Versene® series. Or if solutions drift from one pH value to another, an effective Versene combination can be devised to completely complex metal ions present. However, when it is desirable, the claw-like holding power of chelation can be reversed. In polymerization reactions, for example, ferrous iron ions can be released gradually at a predetermined rate.

SYNTHETIC RUBBER MANUFACTURE

Erratic polymerization has been a costly bottleneck in producing synthetic rubber. Now, research has disclosed that this situation can be corrected by means of a reproducible redox catalyst activation system using Versene Fe-3 alone or with pyrophosphate. A blend of ethylenediaminetetraacetic acid and N, N-di-(2-hydroxyethyl) glycine sodium salt, Versene Fe-3 has proved adequate at less than 1/100 of a part per 100 parts of monomer. The complexing action of Versene Fe-3 locks large reservoirs of ferrous ions in the chelated form and releases them gradually, allowing polymerization to continue at a controlled rate for a longer period. Results: Uniform control of trace metal catalysts is assured; plant operations smooth out; product nonuniformities practically disappear.

SOAPS AND SYNTHETIC DETERGENTS

It should be re-emphasized that a judicious choice of chelating agent must be exercised for a particular application. If the right Versene or Versene combination is properly used in a detergent formulation, processing is improved, exceptional water-softening and detergent properties are realized. For unlike dehydrated phosphates, which lose effectiveness in alkaline media and at high temperatures, the Versene remains stable; is many times more effective; and can be used in formulating all types of soaps and synthetics—liquid, bar, powdered, or flake. It is a simple matter, for example, to include Versene in liquid soaps. Here, the chelation action provides the same clarity with hard water as can be achieved with distilled or rain water. Also, the soap comes out lighter colored and protected against rancidity and change of color. When the soap is stored in glass, Versene inhibits silica deposition.

Or consider solid detergents. Versene makes possible a bar soap that can resist water of 10 grains hardness! pH is an important factor. Versene 9 is recommended, since large amounts may be added without changing the pH of the product.

TEXTILE PROCESSING

The textile industry is using chelation to advantage too . . . in kier boil and bleach operations . . . to produce softer, stronger fabrics that take dye better. For, in complexing metal ions, chelation results in a new compound that cannot be precipitated by common agents. In kier boiling operations, Versene T inactivates iron and other metal ions which discolor the cloth, and removes rust and corrosion deposits from the processing equipment. Often a larger amount of Versene T may be necessary due to the rust build-up in the system. Later, the amount is reduced and equipment remains clean, thus making possible cleaning and bleaching of the fabric producing high-quality goods through metal ion control.

A NEW KIND OF CHEMISTRY?

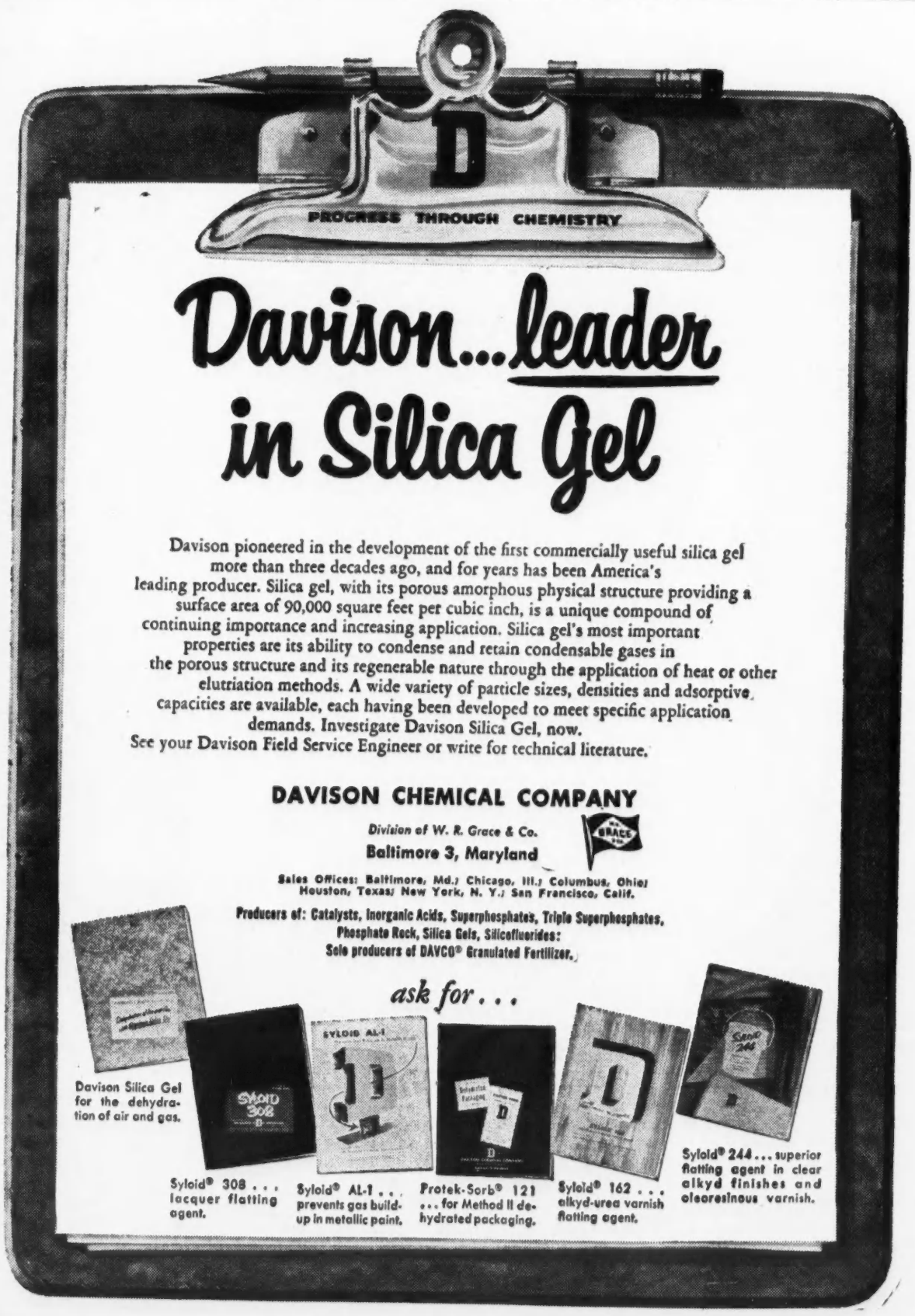
Is chelation the answer to all ion contamination difficulties? Despite its many successful applications, the answer is sometimes "no". For, remarkable as it is—in locking up metal ions to improve production and product quality—chelation does not solve all problems in every application. But wherever metal ions do pose a problem, investigation is worthwhile. And we'll help in every possible way. To see if you can put the Versene or Versenol products to profitable use, write Technical Service and Development, Dept. SC 9114P-3 THE DOW CHEMICAL COMPANY, Midland, Michigan.

YOU CAN DEPEND ON DOW

Monomethylamine, 40% soln., dms., frt. equald, 100% basis lb. .37 • —
dms., l.c.l., frt. equald, 100% basis lb. .37½- —
tanks, frt. equald, 100% basis. lb. .31 • —
Monosodium glutamate, dms., c.l.lb. 1.15 • —
dms., l.c.l. lb. 1.23 • 1.27
Monosodium phosphate, (see Sodium phosphate, monobasic).
Montan wax, dom., refd., bgs. lb. .29 • .30
Imp., crude, Bohemian, bgs. lb. .26 • .28
German, bgs. lb. .35 Nom.
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol).
Morphine, cns. oz.12.40 -12.60
Morphine actate, anhyd., cns. oz. 9.95 -10.00
Morphine hydrobromide, cns. oz. 9.90 • 9.95
Morphine hydrochloride, NF, cns.oz. 9.90 • 9.95
Morphine sulfate, USP, cns. oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd. E. lb. .55¼- —
dms., l.c.l., dlvd E. lb. .56¼- —
tanks, dlvd. E. lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots. lb. 4.45 • 5.15
Syn., ambrette, cns., 25-lb. lots. lb. 5.05 • 5.65
cns., 5-lb. lots. lb. 5.20 • 5.50
Ketone, fib. dms., 100-lb. lots.lb. 4.70 • 5.30
cns., 25-lb. lots. lb. 5.35 • —
cns., 5-lb. lots. lb. 5.45 • —
xylol, fib. dms., 100-lb. lots. lb. 1.40 • —
cns., 25-lb. lots. lb. 1.45 • —
cns., 5-lb. lots. lb. 1.50 • —
Mustard seed, Danish, yellow, bgs.lb. .10½- —
Dutch, bgs. lb. .10½- —
English, yellow, bgs. lb. .11 • —
Montana, oriental, bgs. lb. .08½- Nom.
yellow, bgs. lb. .10½- —
Mustard seed oil, nat. dms. lb. .17½ Nom.
Syn., bots. lb. 1.60 • 1.85
Myristic acid, dms. lb. .26 • .28
Myrobalans, Bombay, bgs., ex dock ton.57.00 -58.00
J-1, genuine, bgs., ex dock. ton.62.00 -63.00
J-1, crushed, bgs., ex dock. ton.79.00 -80.00
Myrobalans extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty. lb. .10 • .10¼
Myrrh gum, cs. lb. .55 • —

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, 140°F. flash, tanks, east coast, New Jersey and New York. gal .18 • —
tanks, group 3. gal. .155 • —
tankwagon, Newark gal. .19 • —
New York gal. .19 • —
Philadelphia gal. .19½- —
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, west coast, Los Angeles. gal. .174 • —
Naphtha, VM&P, petroleum, 225°-300°F., b.r., tanks, Portland, Ore. gal. .18 • —
San Francisco gal. .179 • —
Seattle, Wash. gal. .18 • —
east coast, New Jersey and New York. gal. .19 • —
group 3 gal. .13875- —
tankwagon, Boston. gal. .21½- —
Chicago gal. .299 • —
Cleveland gal. .24½- —
Newark gal. .20½- —
New York gal. .20½- —
Philadelphia gal. .21½- —
Pittsburgh gal. .20 • —
Naphthalene, crude, dom., 74°, tanks, frt. equald. lb. .06¼- —
78°, bgs., c.l., same basis. lb. .07½- .08
bgs., l.c.l., same basis. lb. .07¾- .08¼
tanks, same basis. lb. .07 • —
Naphthalene, crude, imp., 78°, bgs., large lots. lb. .05 Nom.
Refd., indust., chipped, crushed, bgs., frt. alld. lb. .12½- —
tanks, same basis. lb. .11¾- —
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis. lb. .15½- —
cs, 50 lbs., c.l., same basis. lb. .15¾- —
1-lb. pkgs., c.l., same basis lb. .18½- —
1-Naphthol-4 sulfonic acid (see Neille and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
Naphthol sulfonic mixed acid (see Cleve5s acid).
1-Naphthylamine-5-sulfonic acid (see Laurents acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).
2-Napthylamine-6-sulfonic acid (see Broenner's acid).
2-Naphthylamine-7-sulfonic acid (see F acid).
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
a-Naphthol bbls., frt. alld. lb. 1.00 • —
b-Naphthol, tech., flake, bbls., c.l., works. lb. .33 • —
bbls., l.c.l., works. lb. .35 • —
Naphthol ITR red toner, bbls., works. lb. 5.50 • —
a-Naphthylamine, bbls., frt. alld. lb. .50 • —
b-Naphthylamine, tech., flake, bbls., works. lb. 1.60 • —
Naringin, fib. dms. lb. 8.50 • —
Neatsfoot oil, 15° cold test, dms. lb. .30 • .33
20° cold test, dms. lb. .29 • .32
30° cold test, dms. lb. .28 • .31
Neocinchophen, USP, dms., frt. adjusted. lb. 7.00 • 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity. gram. .45 • —
fib. dms., 100-999-gram lots, basis activity. gram. .50 • —
Neroli oil, NF, French bots. lb.575.00 • —
Nerolin, cns. lb. 2.45 • 2.65
Nevile and Winther's acid, dms., frt. alld. lb. 1.30 • —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd. lb. .73 • .80
Nickel carbonate, bbls., dlvd. lb. .80¾- .87¾
Nickel chloride, bbls., dlvd. lb. .40½- .48½
Nickel formate, bbls., ton lots, frt. alld. lb. .72 • .73
Nickel metal, electro cathodes, cs., works. lb. .74 • —
Nickel nitrate, bbls., works. lb. .32½- .33½
Nickel oxide, black, bbls. lb. .84 • —
Green, bbls. lb. .85 • —
Nickel sulfate, bgs., c.l., dlvd. lb. .32½- —
bgs., l.c.l., dlvd. lb. .33½- .40½
Nicotinamide USP, dms., frt. adjusted. kilo. 9.50 • 9.80
Nicotinamide hydrochloride, dms., frt. adjusted. kilo. 9.50 • 9.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt. alld. lb. 1.20 • —
40%, manufacturers, 500-lb. dms., frt. alld. lb. 1.05 • —
Nicotinic acid, USP, dms., dlvd. kilo. 8.00 • 8.30
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs. lb. .12 • .12½
Nikethamide, cbys. lb. 7.50 • —
Nitric acid, 36° Be., cbys., c.l., works, E. 100 lbs. 5.75 • —
cbys., l.c.l., works, E. 100 lbs. 6.05 • 6.85
38° Be., cbys., c.l., works, E. 100 lbs. 6.25 • —
cbys., l.c.l., works, E. 100 lbs. 6.55 • 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.73 • —
cbys., l.c.l., works, E. 100 lbs. 7.05 • 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 • —
cbys., l.c.l., works, E. 100 lbs. 7.55 • 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis. 100 lbs. 3.90 • —
94½ to 95½% HNO_3, tanks, works, 100% basis. 100 lbs. 4.90 • —
CP, NF, consumer, cbys., extra, cbys., extra, l.c.l., same basis. c.l., works. lb. .18½- —
lb. .20 • .20½
5-pt. bots, extra, cs., c.l., same basis. lb. .22½- —
5-lb. bots., extra, cs., l.c.l., same basis. lb. .24 • .25
m-Nitroaniline, cryst., dms., frt. alld. lb. 1.15 • —
Paste, dms., frt. alld., 100% basis. lb. 1.10 • —
o-Nitroaniline, flaked, dms., t.l., frt. alld. lb. .49 • —
dms., l.t.l., frt. alld. lb. .51 • —
o-Nitroaniline orange toner, kegs, lb. 1.35 • —
p-Nitroaniline, dms., frt. alld. lb. .445 • —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .14 • —
dms., l.c.l., frt. alld. lb. .15 • —
tanks, frt. alld. lb. .12 • —
p-Nitrobenzoic acid, dms., c.l., dms., l.c.l., works. lb. .73 • —
works. lb. .72 • —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works. lb. .34 • —
bbls., l.c.l., same basis. lb. .35 • .37
18-25 cps., bbls., c.l., same basis. lb. .36 • —
bbls., l.c.l., same basis. lb. .37 • .39
250-400, 600-1,000 secs., bbls., c.l., same basis. lb. .39 • —
bbls., l.c.l., same basis. lb. .40 • .42
Spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis. lb. .41 • —
bbls., l.c.l., same basis. lb. .42 • .44
5-6 cps., 40-60 secs., bbls., c.l., same basis. lb. .40 • —
bbls., l.c.l., same basis. lb. .41 .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.
o-Nitrochlorobenzene, dms., c.l., frt. alld. lb. .15 • —
dms., l.c.l., same basis. lb. .16 • —
tanks, same basis. lb. .13 • —
p-Nitrochlorobenzene, dms. lb. .26 • .27
2-Nitro-4-chlorophenol, dms. lb. .75 • —
Nitroethane, dms., c.l., dlvd. E. lb. .24 • —
dms., l.c.l., dlvd. E. lb. .24¾- —
tanks, dlvd. E. lb. .22½- —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, tanks, frt. equald. unit. 1.20 • —
Nitrogenous process tankage, bulk, works. unit-ton. 3.00 • 4.00
Nitrogenous sewage sludge, bulk, works, unit-ton. 2.95+ .50
Nitromethane, dms., c.l., dlvd. E. lb. .24 • —
dms., l.c.l., dlvd. E. lb. .24¾- —
tanks, dlvd. E. lb. .22½- —
Nitromethane prices West of Rockies are 1c. higher.
a-Nitronaphthalene, bbls., frt. alld. lb. .41 • —
Nitropropane-1 and nitropropane-2, dms., c.l., dlvd. E. lb. .22½- —
dms., l.c.l., dlvd. E. lb. .23¼- —
tanks, dlvd. E. lb. .21 • —
Nitropane prices West of Rockies are 1c. higher.
o-Nitrophenol, dms, works, frt. equald. lb. .94 • —
p-Nitrophenol, dms., frt. alld., c.l., lb. .51 • —
dms., l.c.l. lb. .53 • —
o-Nitrotoluene, dms., c.l., frt. alld.lb. .10 • —
Nitropropane-1 and Nitropropane-2, dms., l.c.l., frt. alld. lb. .27½- —
tanks, frt. alld. lb. .09 • —
p-Nitrotoluene, dms., works. lb. .33 • —
m-Nitro-p-toluidine, dms. lb. 1.59 • —
Nitrous ether, conc., bots., 100-lb. lots. lb. 1.28 • 1.35
Nonyl phenol, dms., c.l., frt. alld. lb. .26½- —
dms., l.c.l., frt. alld. lb. .11 • —
tanks, frt. alld. lb. .24½- —
Nutgalls, Aleppo, bgs. lb. .35 • .38
Chinese, bgs. lb. No prices.
Nutmeg, East Indian, bgs. lb. 2.80 • —
West Indian, bgs. lb. 2.80 • —


PROGRESS THROUGH CHEMISTRY
Davison...leader
in Silica Gel
Davison pioneered in the development of the first commercially useful silica gel more than three decades ago, and for years has been America's leading producer. Silica gel, with its porous amorphous physical structure providing a surface area of 90,000 square feet per cubic inch, is a unique compound of continuing importance and increasing application. Silica gel's most important properties are its ability to condense and retain condensable gases in the porous structure and its regenerable nature through the application of heat or other elutriation methods. A wide variety of particle sizes, densities and adsorptive capacities are available, each having been developed to meet specific application demands. Investigate Davison Silica Gel, now.
See your Davison Field Service Engineer or write for technical literature.
DAVISON CHEMICAL COMPANY
Division of W. R. Grace & Co.
Baltimore 3, Maryland
Sales Offices: Baltimore, Md.; Chicago, Ill.; Columbus, Ohio; Houston, Texas; New York, N. Y.; San Francisco, Calif.
Producers of: Catalysts, Inorganic Acids, Superphosphates, Triple Superphosphates, Phosphate Rock, Silica Gels, Silicofluorides:
Sole producers of DAVCO® Granulated Fertilizer.
ask for . . .
Davison Silica Gel for the dehydration of air and gas.
Syloid® 308 . . . lacquer flatting agent.
Syloid® AL-1 . . . prevents gas build-up in metallic paint.
Protek-Sorb® 121 . . . for Method II dehydrated packaging.
Syloid® 162 . . . alkyd-urea varnish flatting agent.
Syloid® 244 . . . superior flatting agent in clear alkyd finishes and oleoresinous varnish.

Nutmeg oil, USP, dist., East Indian, cns., dms. lb. 15.00 • —
USP, dist., West Indian, cns., dms. lb. 14.50 • —
Nux vomica, bls. lb. .10 • .12
Powd., bbls., bxs. lb. .15 • .17

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms. lb. .53 • —
Octane, indust., tanks, Bayonne, N. J. gal. .19 • —
tanks, Baytown, Tex. gal. .15¾ • —
Borger, Tex. gal. .15¾ • —
1-Octanol, tech., dms., c.l., dlvd. lb. .35 • —
dms., l.c.l., dlvd. lb. .37 • —
tanks, dlvd. lb. .32½ • —
Octyl alcohol, perfumer's grade, bots. lb. 1.60 • 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .24 • —
bgs., l.c.l., works lb. .24½ • —
tanks, works lb. .23 • —
Octyl phenol in dms., 1lc. higher.

Oils

Oil quotations, formerly grouped under one heading, are now listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .18¾ • .19
tanks lb. .17¼ • —
Oleic acid, dbl.-dist. (white), dms. lb. .19¾ • .21¾
tanks lb. .17¾ • —
Single-dist., dms. lb. .17¾ • .19¾
tanks lb. .15¾ • —
Oleo oil, extra, dms. lb. .19 Nom.
Oleostearine, dms lb. .13 • .13½
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs. lb. .20 Nom.
Tears, cs lb. .22 • .30
Olibanum oil, bots lb. 5.50 • 7.65
Extra fine, bots lb. 8.00 • 9.00
Olive oil, edible, Spanish, dms., duty-paid gal. 3.30 Nom.
Edible, Tunisian, dms., same basis. lb. 3.10 • 3.15
Opium, USP, cns. oz. 19.20 -19.45
USP, gran., cns. oz. 21.65 -21.90
powd., cns oz. 21.65 -21.90
Orange oil, expressed, USP, Brazilian, cns., dms lb. No stocks.
Expressed, USP, Calif., cns., dms. lb. .75 • —
Florida, cns., dms lb. .55 • —
Messina, cns lb. 3.85 • 5.85
West Indian, cns., dms. lb. 2.50 • 3.65
Sesquiterpeneless, bots lb. 65.00 -120.00
Sweet, dist., cns., dms lb. .45 • .80
Orange peel, bitter, Haitian, bls. lb. .14 • .16
Sweet, bls lb. .16 • .18

Orange Pigments

Orange pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns. lb. 2.00 • —
Orris root, Florentine, bls. lb. .55 • —
powd., bbls., bxs. lb. .68 • —
Verona, bls. lb. .35 • .40
Orthoanisidine (see o-Anisidine).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochlorobenzoic acid, (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Osage orange, cryst., No. 1, bbls. l.c.l lb. .40 • —
Extract, liq., No. 1, bbls., l.c.l., lb. .19 • —
Ouabain, USP, bots gram. 3.00 • 4.00
Ouricury wax, crude, bgs. lb. .78 • .80
refd., pure, bgs lb. .85 • .87
Oxalic acid, bbls., c.l., works lb. .16½ • —
bbls., 10,000-lb. lots, works lb. .16¾ • —
bbls., smaller lots, works lb. .17¾ • —
b-Oxynaphthoic acid, fib. dms., 250 lbs. or more, frt. alld lb. 1.14 • 1.17
Oxyquinolin sulfate, cns. 100-lb. lots, works lb. 4.75 • 5.00
cns., smaller lots, works lb. 4.92 • 5.17

P

Palm oil, clarif., dms lb. .15¼ • .16¼
Palm oil acids, dist., dms. lb. .14¾ • .16¾
tanks lb. .12¾ • —
Palmarosa oil, cns. lb. 6.50 • —
Papain, USP, African, bots lb. 6.00 • —
USP, Ceylon, bots. lb. 6.00 • 6.25
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 • —
cns., smaller lots oz. 5.05 • 5.20
Papaverine sulfate, nat. or syn., USP, cns oz. 7.10 • 7.35
Paprika, Rumanian, bgs. lb. .26 • —
Spanish, bgs. lb. .60 • —
Yugoslavian, bgs. lb. .35 • —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Para-aminosalicylic acid (see p-Aminosalicylic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls. lb. 1.15 • —
Chlorinated, kgs. lb. 1.30 • —
Paraffin, crude, scale white, 123°-127°F, ASTM, tanks, refy. lb. .0710- —
Fully refd., 122°-124°F, ASTM, tanks, refy. lb. .0815- —
125°-127° F, ASTM, tanks, refy. lb. .0815- —
130°-132°F, ASTM, tanks, refy. lb. .0815- —
132°-134°F, ASTM tanks, refy. lb. .0815- —
135°-137°F, ASTM, tanks, refy. lb. .0815- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraffin oil, pale, 100-110 vis. at 100°F., tanks, east coast refy. gal. .14 • —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .11¼ • —
bgs., l.c.l., frt. alld lb. .13¼ • .14¼
91%, powd., bgs., c.l., ex whse lb. .167 • —
bgs., l.c.l., ex whse lb. .182 • —
USP X, fib. dms., c.l. lb. .19 • —
fib. dms., 1,000-lb. lots lb. .20 • —
fib. dms., smaller lots lb. .21½ • —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. lb. .14 • —
55-gal dms., l.c.l., dlvd. lb. .15 • —
tanks, dlvd. lb. .11½ • —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15%, dealers, bgs., dms., frt. alld. lb. .50 • .53
Tech., dms., c.l., t.l., works lb. 1.3395- —
dms., l.c.l., works lb. 1.51 • —
Paratoluenesulpnonamide (see p-Toluenesulfonamide).
Paris green, dealers, dms., c.l., frt. alld. lb. .44 • .47
dms., l.c.l., same basis lb. .45 • .48
Passion flower herb, bls. lb. .25 • —
Patchouli oil, dms. lb. 6.00 • —
Peach kernel oil, USP, (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd., N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .90 • —
Peacock blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Peanut meal, 45%, old process, bgs., mills ton. 43.00 • —
Solvent extracted, bgs., mills ton. 42.00 • —
Peanut oil, crude, tanks, f.o.b. mills. lb. .13¾ • —
Refd., dms lb. .19½ • .19¾
tanks lb. .17½ • —
Pectin, citrus, dom., powd., bbls. lb. 2.05 • 2.06
Dom., tech., powd., bbls. lb. 1.35 • —
Imp., Danish, ex whse. lb. 1.28 • —
Penicillin, potassium, cryst., bulk 1,000,000 units. .0675- .0700
Penicillin, procaine, bulk 1,000,000 units. .0675 -.0700
Penicillin, sodium, bulk 1,000,000 units. .0775- .0800
Pennyroyal oil, USP, imported, cns. lb. 2.75 • 3.50
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .22 • —
dms., l.c.l., same basis lb. .23½ • .30
Pentaerythritol, tech., bgs., c.l., works lb. .32 • —
bgs., l.c.l., works lb. .33 • —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 • —
Pepper, black, Malabar, spot bgs. lb. .28½ • —
Red, Gondar, spot, bgs. lb. No prices.
Japanese, hontaka, bgs. lb. .34 • —
Japanese, birdseyes, bgs. new crop lb. No prices.
Mombasa, bgs., shipt. lb. .56 • .57
Nigerian, bgs. lb. .42 • —
Turkish, bgs. lb. .28 • —
White, bgs. lb. .35 • .36

OIL OF ORANGE, U.S.P.

Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

Exchange

Sunkist Growers
Products Department • Ontario, California

Distributed in the U.S. and Canada by
Dodge & Olcott, Inc., 180 Varick St.
New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave.
New York 11, N.Y.
Ungerer & Company, Inc.
161 Avenue of the Americas
New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

Peppermint Leaves—Pinetar Oil

Peppermint leaves, dom., USP, bls., dms lb. .70 - .75
Imp., USP, bls. lb. .85 - —
Peppermint oil, nat., dms. lb. 4.75 - 6.50
Redist., USP, dms. lb. 5.25 - 6.75
Perchloroethylene, dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd lb. .15¼- —
tanktruck, 1,000 gal., min., dlvd. lb. .12¾- —
tanks, dlvd lb. .12¼- —
Peri acid, dry, bbls., frt. alld lb. 1.35 - —
Paste, bbls., frt. alld lb. 1.30 - —
Persic oil, USP (see Apricot kernel oil).
Peru balsam, dms. lb. 1.25 - 1.50
Petitgrain oil, South American, cns., dms lb 3.00 - —
Petrolatum, cream, dms., c.l., refy. lb. .07½- —
dms., l.c.l., dlvd. lb. .09¾- —
tanks, refy. lb. .05¼- —
Extra amber, dms., c.l., refy. lb. .0⅝½- —
dms., l.c.l., dlvd. lb. .08¼- —
tanks, refy. lb. .04¼- —
USP, lily white, dms., c.l., refy. lb. .07⅛- —
dms., l.c.l., dlvd lb. .10⅛- —
tanks, refy. lb. .05⅝- —
snow white, dms., c.l., refy lb. .08⅜- —
dms., l.c.l., dlvd lb. .10⅝- —
tanks, refy lb. .06⅛- —
soft yellow, dms., c.l., refy lb. .06½- —
dms., l.c.l., dlvd lb. .08¼- —
tanks, refy lb. .04¼- —
Petroleum pitch (see Asphalt, petroleum).

Petroleum Products

Petroleum product quotations, formerly grouped under one heading, are now listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonates, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb .17 - —
tanks, works lb .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb. .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms., same basis lb. 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld. E. of Rockies lb. .17¾- .18
non-ret. dms., l.c.l., same basis, lb. .18¼- .19
tanks, same basis lb. .16 - —
Phenol, 82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
non-ret. dms., same basis lb. .18½- —
tanks, same basis lb. .15½- —
39°C. or above, tar distilled non-ret. dms., c.l., same basis lb. .19¼- .19½
non-ret. dms., l.c.l., same basis, lb. .19¾- .20½
tanks, same basis lb. .17½- —
USP, syn., dms., c.l., t.l., frt. alld lb. .20 - —
dms., same basis lb. .22 - —
tanks, same basis lb. .18 - —
Phenolphthalein, USP or yellow, fib. dms., 2,000-lb. lots lb. 1.15 - —
fib. dms., smaller lots lb. 1.17 - 1.22
Phenothiazine, drench, fib. dms., t.l., frt. adjusted lb. .44 - —
fib. dms., l.t.l., same basis lb. .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms., l.t.l., same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots lb. 2.40 - 2.70
100%, bots lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb. 1.45 - 1.75
dl-Phenylalanine, dms., works lb. 27.00 - 37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E. lb. 3.45 - —
fib. dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .40½- —
dms., l.c.l., dlvd. E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms., frt. alld. lb. .95 - —
m-Phenylenediamine, coml., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
o-Phenylenediamine, refd., tech., dms., works lb. 1.42 - —
p-Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .76¼- —
Phenylethyl acetate, bots lb. 1.25 - 1.60
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.45
Standard, dms lb. 1.10 - 1.60
Phenylglyconic acid (see Mandelic acid).
Phenylhydrazine base, CP, btos lb. 3.00 - 3.07
Phenylhydrazine hydrochloride, coml., kgs., works lb. 1.75 - —
Purif., bots., works lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd. E lb. 1.80 - —
fib. dms., smaller lots, dlvd. E lb. 2.10 - —
Phenylethylphenyl acetate, bots lb. 4.15 - 4.35
o-Phenylphenol, dms., l.c.l., works, lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .37 - —
bgs., l.c.l., works lb. .41½- —
Philippine copal gum, pale, chips, bgs lb. .25½- .28
Pale, nubs, bgs lb. .32½- .36
seeds, bgs lb. .20 Nom.
sorts, bgs lb. .23½- .26
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb. 17.75 - —
Tech., fib. dms., works lb. 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosphite, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, 66-68% b.p.l., bulk, c.l., mines. long-ton. 5.115 - —
68-70% b.p.l., bulk, c.l., same basis long-ton. 5.515 - —
70-72%, b.p.l., bulk, c.l., same basis long-ton. 6.165 - —
74-75%, b.p.l., c.l., bulk, same basis long-ton. 7.165 - —
76-77% b.p.l., c.l., bulk, same basis long-ton. 7.165 - —

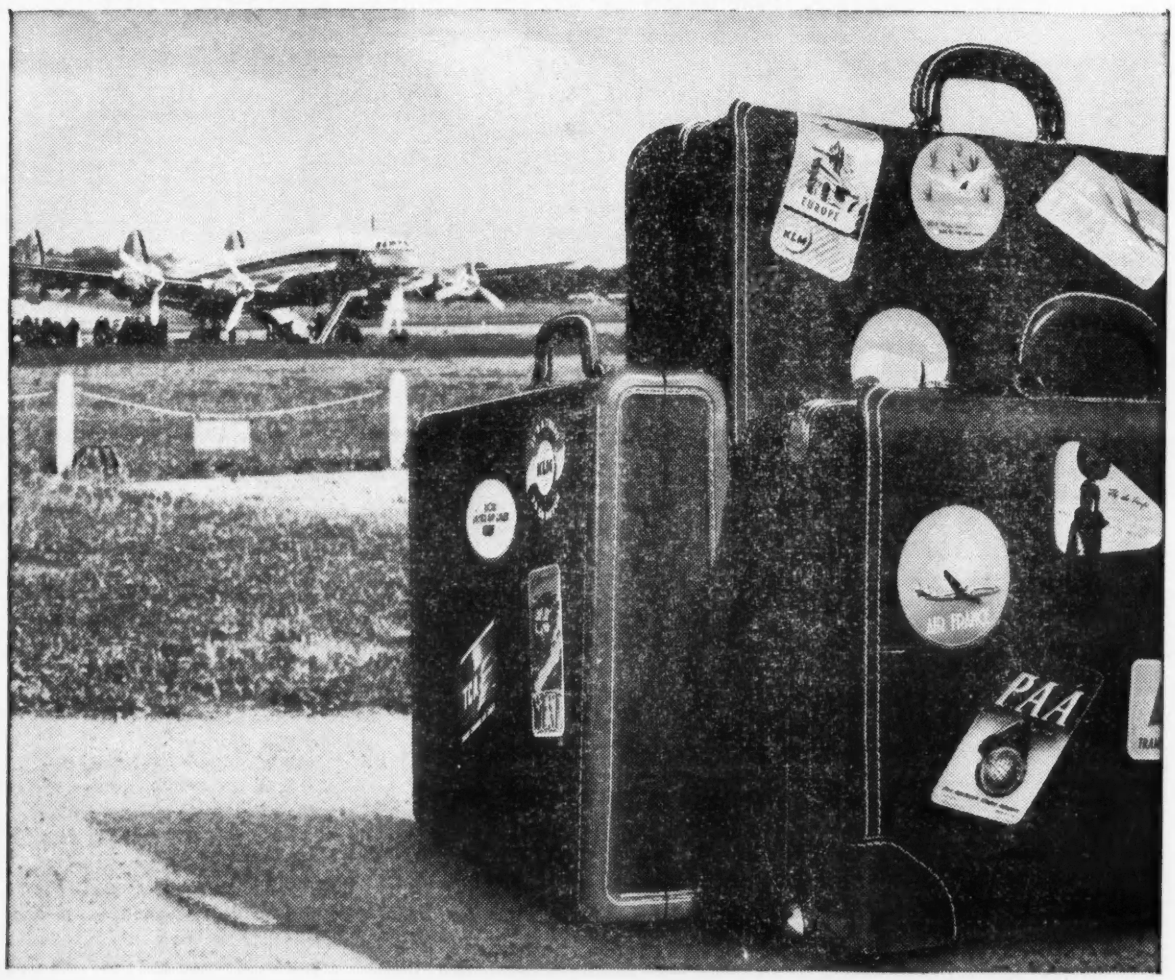
Above Florida prices are based on fuel oil at $2.82 per bbl. and labor at $1.43.

Phosphoric acid, food grade, 75%, cbys. c.l., works, E, frt. equald. 100 lbs. 6.75 - —
cbys., l.c.l., same basis 100 lbs. 7.00 - 7.50
tanks, works 100 lbs. 5.35 - —
80%, cbys., c.l., frt. alld. 100 lbs. 7.60 - —
cbys., l.c.l., works 100 lbs. 7.85 - 9.10
tanks, works 100 lbs. 5.75 - —
NF, 85%, cbys., c.l., works lb. .0825- —
cbys., l.c.l., works lb. .0850- .0875
tanks, works lb. .0640- —
Phosphorus, amorph., red, dms., t.l., works lb. .48 - —
dms., smaller lots, works lb. .49 - .50
Amorph., white (yellow), solid, dms., c.l., works, frt. equald. lb. .20 - .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phosphorus pentasulfide, solid, dms., c.l., works lb. .11½- —
dms., l.c.l., works lb. .12½- —
Phosphorus pentoxide, dms., c.l., works lb. .1395- .1450
dms., l.c.l., works lb. .1695- .1750
Phosphorus sesquisulfide, tins, cs., c.l., works lb. .38 - —
tins, cs., l.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., l.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
bgs., l.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½- —
Phthalimide, 97-98%, dms., frt. equald lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 3.45 - —
Resinated, bbls., same basis lb. 3.00 - —
Water dispersable, bbls., same basis lb. 1.69 - —

Phthalocyanine blue dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Ohama, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.

Phthalocyanine green toner, bbls., works lb. 3.95 - —
Resinated, bbls. lb. 3.50 - —
Water dispersable, bbls. lb. 1.71 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
NF lb. 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .43 - .43⅛
dms., l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline, 5°C, dms., c.l., works. lb. .32½- —
dms., l.c.l., works lb. .33 - —
g-Picoline, 98%, dms., works lb. 2.00 - —
Picric acid, NF, bbls lb. .85 - —
Tech., bbls. lb. .44 - —
Pigment green B, kgs. lb. 1.35 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 - 5.25
Pilocarpine nitrate, USP, bots., vials. oz. 4.65 - 4.75
Pimento, Jamaican, bgs. lb. .72 - —
Mexican, bgs. lb. .36 - —
Pimento berry oil, NF, dms. lb. 5.50 - —
Pimento leaf oil, cns lb. 2.00 - 2.60
Pine oil, dest.-dist., dms., l.c.l., works lb. .12¼- —
dms., l.c.l., ex whse New York. lb. .14¼- —
Steam-dist., dms., ex whse, New York lb. .176 - —
dms., dlvd. lb. .179 - —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pinetar oil, coml., dms., c.l., works. lb. .0561- —
dms., l.c.l., works lb. .0634- —
dms., c.l., ex whse., New York. lb. .0745- —
tanks, works lb. .046 - —
Rectified, NF, dms. inclu., l.c.l., works, south gal. 1.05 - —
dms. incl., l.c.l., ex whse., New York gal. 1.15 - —
Refd., dms. incl., l.c.l., works gal. .92 - —
dms, incl., l.c.l., ex whse., New York gal. 1.02 - —

TOMORROW'S PRODUCTS TODAY...THROUGH ENJAY PETROCHEMICALS



Basic raw materials for VINYLS that add new style to lightweight luggage!

Colorful, lightweight luggage is now made with vinyl—and the demand is great! The current large use of vinyl plastics has placed increasing importance on the quality of the plasticizers used in these products. Naturally, manufacturers want the best.

Enjay Isooctyl and Decyl Alcohols make excellent plasticizers. Like all Enjay petrochemicals, they meet the most exacting standards of uniformity and purity.

The recently expanded Enjay Laboratories are fully equipped to assist you in the application of Enjay petrochemicals to your products. Just call or write for complete information.

Enjay offers a widely diversified line of petrochemicals for industry:

ALCOHOLS & SOLVENTS: Lower Alcohols, Oxo Alcohols, Ketones and Solvents; OIL & FUEL IMPROVERS: Detergent-Inhibitors, V-I Improvers, Oxidation-Inhibitors; CHEMICAL RAW MATERIALS: Olefins, Diolefins, Aromatics; ENJAY BUTYL RUBBER & VISTANEX.

ENJAY

Pioneer in Petrochemicals

ENJAY COMPANY, INC., 15 W. 51st STREET, NEW YORK 19, N. Y. Akron, Boston, Chicago, Los Angeles, New Orleans, Tulsa

Pink root, bls. ..... lb. 2.50 - —
Piperazine, 95% or better, dms., c.l., minimum frt. alld ..... lb. 2.84 - —
dms., l.c.l., same basis ..... lb. 2.88 - —
Piperazine citrate, 100-lb. lots ... lb. 2.00 - —
Piperazine hexahydrate, French Codex, bots., 100-lb. lots lb. 1.60 - —
Piperadine, dist., dms., frt. equald. lb. 2.60 - 2.70
Piperonyl butoxide, dms., dlvd. E.lb. 4.50 - 5.05
Piperonyl cyclonene, dms., dlvd. E.lb. 3.70 - 4.25

Pitches

Pitch quotations, formerly grouped under one heading, are now listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum).
Platinum metal, works ..... oz. 98.00 -101.00
Pleurisy root, bls. ..... lb. .45 - .50
Podophyllum resin, NF, dms ... lb. 15.60 -16.10
Poke root, bls. ..... lb. .19 - .22
Pontianak copal gum, chips, bgs lb. — —
Nubs, bgs. ..... lb. .37 - .40
Polymyxin, bulk, bots., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units, 1,000,000 units. .54 - —
bulk, bots., 1-25-billion units. 1.000.000 units. .56 - —
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works lb. .41 - —
dms., 10,000-20,000-lb. lots, works. lb. .43 - —
dms., smaller lots, works ..... lb. .46 - .48
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works. lb. .41 - —
dms., 10,000-20,000-lb. lots, works. lb. .43 - —
dms., smaller lots, works ..... lb. .46 - .48
Poppy seed, Argentine, bgs ..... lb. .24 - —
Dutch, bgs ..... lb. .28 - —
Iranian, ... lb. .14½ - .15
Polish, bgs ..... lb. .27½ - —
Turkish, bgs ..... lb. .24 - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
dms., l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis ... 100 lbs. 3.70 - —
Reg., flake, 88-92%, dms., c.l., same basis ... 100 lbs. 9.15 - —
dms., l.c.l., same basis. 100 lbs. 10.20 - —
Solid, 88-92%, dms., c.l., works. 100 lbs. 8.70 - —
dms., l.c.l., works ... 100 lbs. 9.75 - —
Potassium acetate, NF, dms ... lbs. .31 - .36
Potassium bicarbonate, USP, gran., dms lb. .22 - —
USP, powd., dms ..... lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., l.c.l., works ..... lb. .18½ - .19¾
Potassium bichromate in dms. ½c. higher.
Potassium bitartrate, NF, dom., gran. or powd., bbls. 5,000 lbs. 1 shipt lb. .40½ - —
NF, dom., gran. or powd., dms., c.l. lb. .40 - —
smaller lots ..... lb. .41 - .43
NF, imp., gran. or powd., kgs lb. .33½ - .37
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works ... lb. .52 - .62
Potassium bromide, USP, gran., bbls., kgs. lb. .39 - .40
Potassium carbonate, NF, gran., bbls., dms lb. .20 - —
NF, powd., bbls., dms ..... lb. .21 - .22
Tech., calcined, bbls., c.l., works, 100 lbs. 9.00 - —
bbls., l.c.l., same basis. 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works ... 100 lbs. 7.60 - —
bbls., l.c.l., works ... 100 lbs. 8.65 - —
Potassium chlorate, cryst., dms., c.l., works lb. .11¼ - —
dms., l.c.l., works ..... lb. .11½ - .12½
Powd., dms., c.l., works ..... lb. .11¾ - —
dms., l.c.l., works ..... lb. .12 - .13
NF, gran., 25-lb. metal dms .. lb. .36 - —
Potassium chloride, agricultural (see Potassium muriate).
Potassium chloride, indust., 99.9% KCl, bulk, c.l., works. ton. 29.00 - —
bgs., c.l., works ..... ton. 33.50 - —
99.3% KCl, bulk, c.l., works. ton. 27.00 - —
bgs., c.l., works ..... ton. 31.50 - —
USP, cryst., dms ..... lb. .21 - .23
gran., dms ..... lb. .15 - .17
powd., dms ..... lb. .24 - .26
Potassium chromate, tech., bgs lb. .50 - .50½
Potassium citrate, USP, gran., dms. lb. .43 - —
USP, powd., dms ..... lb. .40½ - .41½
Potassium cyanide, dms. 20,000-lb. lots or more works .. lb. .45 - —
dms., 2,000-19,999-lb. lots, works. lb. .455 - —
dms., smaller lots, works ... lb. .465 - —
Potassium dichromate (see Potassium bichromate).
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works ... lb. .65 - —
Potassium ferrocyanide, bgs., ton lots lb. .23 - —
bgs., smaller lots ..... lb. .23½ - —
Potassium fluoborate, fib. dms., c.l., works lb. .30 - —
fib. dms., l.c.l., works ..... lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, dms. ..... lb. 1.62 - —
Potassium guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Potassium hydroxide, tech. (see Potash, caustic).
Potassium hydroxide, USP, pellets, 100-lb. dms., 1 to 100-dm. lots lb. .33½ - .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb. lots .... lb. 1.38 - —
Potassium iodide, dms. ..... lb. 1.90 - 1.95
Potassium manure salt, 22% K_2O, bulk, c.l., works ..... unit-ton. .17 - .1765
Potassium metabisulfite, gran., dms. lb. .20 - .21
Powd., dms. ..... lb. .25 - —
Potassium muriate, standard and gran., 59-63% K_2O, bulk, c.l., works, base price .. unit-ton. .36 - —
bulk, c.l., works, July forward unit-ton. .38 - —
Gran., 60-63% K_2O, bgs., c.l., works, base price ton. 26.25 - —
bgs., c.l., works July forward ton. 27.45 - —
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs. 16.50 - —
bbls., smaller lots ... 100 lbs. 17.50 -18.00
NF, gran., bgs., 20-ton lots. 100 lbs. 9.25 - —
bgs., smaller lots ..... 100 lbs. 10.50 -11.00
NF, powd., bgs., 20-ton lots 100 lbs. 10.25 - —
bgs., smaller lots .... 100 lbs. 11.50 - 12.00

Potassium oxalate, neutral, tech., fine gran., bbls., dms. lb. .30 - .31
Potassium pentaborate, gran., bgs., c.l., works .. ton. 191.50 - —
dms., ton lots, ex whse .. ton. 302.00 - —
dms., smaller lots, ex whse .. ton. 307.00 - —
Powdered potassium pentaborate $10.25 per ton higher.
Potassium perchlorate, dms., c.l., works lb. .18½ - —
dms., l.c.l., works ..... lb. .19 - .20
Potassium permanganate, coml. kgs., works lb. .26 - .29
USP, dms., works ..... lb. .29¼ - .31
Potassium persulfate, dms., c.l., works lb. .17½ - —
dms., l.c.l., works ..... lb. .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb. .15½ - .18½
Potassium prussiate red (see Potassium ferrocyanide).
Potassium prussiate red (see Potassium ferricyanide).
Potassium silicate, electrical grade, 29° Be, 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., l.c.l., 5 dms. or more, works 100 lbs. 7.25 - 7.65
tanks, works ..... 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
dms., l.c.l., 5 dms. or more works 100 lbs. 7.20 - 7.60
tanks, works ..... 100 lbs. 6.10 - —
Glass, bgs., c.l., works 100 lbs. 17.00 -17.30
bgs., l.c.l., works ..... 100 lbs. 17.80 - —
Soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
dms., l.c.l., 5 dms. or more works 100 lbs. 6.55 - 6.95
tanks, works ..... 100 lbs. 5.45 - —

Potassium silicofluoride, bgs., works lb. .09½ - .10
Potassium silicofluoride in drums, 0.4c. per lb. higher.
Potassium stannate, dms., frt. alld. E lb. .776 - .848
Potassium sulfate, agricultural, 50% K_2O, bulk, works, base price unit-ton. .64 - —
bulk, works, July forward. unit-ton. .67 - —
NF VII, cryst., dms ..... lb. .31 - .33
gran., dms. ..... lb. .18½ - —
powd., dms. ..... lb. .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate).
Potassium thiocyanate, NF, cryst., dms., works lb. .84 - .94
Tech., dms., works ..... lb. .77 - .79
Potassium titanate, ctns., c.l., works. lb. .16¼ - —
ctns., 5-ton lots, works ..... lb. .16½ - —
ctns., 1-ton lot or less, works lb. .16¾ - —
Potassium toluene sulfonate, dms., c.l. or t.l., works ..... lb. .42 - —
dms., l.c.l., works ..... lb. .46 - —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton. 13.45 - —
bulk, works, July forward ton. 14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., dms., c.l. lb. .42½ - —
dms., 5,000-lb. lots ..... lb. .43 - —
dms., smaller lots ..... lb. .43½ - .49

Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
fib. dms., l.c.l., works lb. .52½ - .53
Potato starch (see Starch, potato).
Pregnenolone, bots. ..... gram. .45 - —
Pregnenolone acetate, bots. . gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.82 - —
dms., 100-500 lb. lots ..... lb. 2.95 - 3.15
Progesterone, USP, bots., 100 gram lots gram. .50 - —
Progesterone acetate, bots. gram . .70 - —
Propane, indust., tanks, group 3. gal. .05 - —
tanks, New York harbor . gal. .093 - —
Propionic acid, syn., pure, dms., c.l., works lb. .22¾ - —
dms., l.c.l., works ..... lb. .23¾ - —
tanks, works ..... lb. .20¾ - —
n-Propyl acetate, dms., c.l., dlvd. lb. .14¼ - —
dms., l.c.l., dlvd. ..... lb. .15¼ - —
tanks, dlvd. ..... lb. .11¾ - —
n-Propyl alcohol, dms., c.l., dlvd lb. .13½ - —
dms., l.c.l., dlvd ..... lb. .14½ - —
tanks, dlvd. ..... lb. .11 - —
n-Propyl gallate, dms., 100 to 2,000-lb. lots works lb. 3.90 - 4.40
n-Propyl p-Hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo. 55.00 - —
bots., smaller lots ..... kilo. 55.10 -55.30

Here's only a partial listing of Vancoram chemicals serving industry. C.P. grades and many other special chemicals are available for specific applications.

	Typical Analysis
Ammonium Metavanadate — Technical grade	NH_4VO_3 ..... min. 99%
Vanadium Pentoxide	
Technical grade — air dried	V_2O_5 ..... 83/86%
Technical grade — fused form	V_2O_5 ..... 88/92%
Purified grade	V_2O_5 ..... 99.5/99.7%
Sodium Orthovanadate	
Technical grade — ($Na_3VO_4 \times H_2O$)	V_2O_5 ..... approx. 26.75% Na_2O ..... approx. 22.60%
Commercial grade — ($Na_3VO_4 \times H_2O$)	V_2O_5 ..... approx. 23.00% Na_2CO_3 ..... approx. 15.00%
Sodium Metavanadate — Technical grade	V_2O_5 ..... 61.40% Na_2O 20.90%
Vanadium Chloride — Syrupy — C.P.	$V_2O_3Cl_4 \cdot 5H_2O$ approx. 82.00%

Application problems? For technical assistance, just call your nearest Vanadium Corporation office.

What's New in VANCORAM VANADIUM CHEMICALS

The ever-expanding volume and scope of the chemical industry affects more and more raw material sources. Owing to their special properties, Vancoram chemicals are keeping pace with this growth. They are increasing in direct and indirect use: in the production of dyes, inks and ceramics, as well as in the preparation of catalysts for the production of synthetic fibers, sulphuric acid and organic intermediates.

Now, thanks to a new plant at Cambridge, Ohio—which combines VCA's chemical production, research and pilot plant operations under one roof—Vancoram chemicals are produced in greater quantity to meet the growing needs of growing industries. What's more, these modern research, development and testing facilities assure the purity and uniformity standards that today's high level production demands.

VANADIUM CORPORATION OF AMERICA

420 Lexington Avenue, New York 17, N. Y. • Pittsburgh • Chicago • Detroit • Cleveland

Producers of alloys, metals, and chemicals

Propylene dichloride, consumers, dms., c.l., dlvd. E lb. .0845- —
dms., l.c.l., same basis lb. .0950- —
tanks, same basis lb. .07 - —
Propylene dichloride prices in wet 1c. higher dlvd. on same basis.
Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
USP, dms., c.l., dlvd E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .15½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½- —
Propylene oxide, dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., dlvd. E lb. .19 - —
tanks, dlvd. E lb. .16½- —
Psyllium seed, black, bgs lb. .28 - .30
Blonde, bgs lb. .18 - —
Husks, bgs. lb. .40 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03⅞- .04½
Imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½- —
fine, bgs., ton lots lb. .04 - —
sun dried, coarse, bgs ton 58.00 - —
fine, bgs ton. No Prices
Pumpkin seed, bgs lb. .25 - .26

Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls., works lb. .45 - —
Powd., 1.3% pyrethrins, bbls., works lb. .65 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal. 8.75 - 8.85
100/1 basis (10 grams pyrethrins per 100cc odorless base) dms., works gal. 41.75 -42.75
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb. 10.00 - —
Purif., 20% dms., works lb. 10.00 -10.10
Pyridine, denat., dms., c.l., works and frt. equald gal. 2.77 - —
dms., l.c.l., same basis gal. 2.80 - —
Refd., 2°, non-ret. dms., l.c.l., same basis lb. .75 - —
Pyridoxine hydrochloride, bots., 100-gram lots gram. .29½- —
Pyrites, Canadian, 48-50% S, works, long-ton. 5.00 - 6.00
Pyrocatechol (see Catechol).
Pyrogallic acid, NF (see Pyrogallol).
Pyrogallic acid, tech., bbls lb. 3.17 - 3.25
Pyrogallol, NF, 100 lb. dms lb. 3.50 - —
Pyroxylin scrap, shavings, amber, cs., works lb. No stocks
Shavings, mixed colors, dms., works lb. .11 - —
translucent colors, dms., works. lb. .16 - —
translucent pastels, cs., works. lb. .14 - —

Pyroxylin, scrap, shavings, white, China, ivory, dms., works lb. .16 - —
white, dense, opaque, dms., works lb. .12 - .15
Pyroxylin scrap, unground, amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed, mottled, dms., works lb. .13 - —
USP, bots lb. 9.50 - —

Q

Quassia chips lb. .17 - —
Quebracho extract, clarif., grd., 70% tannin, bgs., works lb. .16½- .17
Clarif., liq., 35% tannin, bbls., works lb. .08¼- .08½
Clarif., solid, 64% tannin, bgs., c.l., ex dock, duty extra. lb. .107429 —
ord., 63% tannin, bgs., c.l., same basis lb. .098035 —
Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 - —
Liq., No. 1, bbls., l.c.l. lb. .19 - —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 2.00 Nom.
Quinidine sulfate, USP, cns., 100-oz. lots oz. .73 - .75
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Quinine bisulfate, USP, cns., 100-oz. lots oz. .37½- —
Quinine hydrochloride, cns., 100-oz. lots oz. .35 - .47½- —
Quinine sulfate, USP, cns., 100-oz. lots oz. .27 - .33
Quinoline, dms., c.l., frt. equald lb. .50¾- —
dms., l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt, paste, dms., frt. alld., 100% basis lb. .88 - —
Powd., frt. alld. 100% basis lb. .98 - —
Rapeseed oil, tanks lb. .18¾- —
Rauwolfia serpentina root, powd., bbls., dms. lb. 1.75 - —
Red, carmine, No. 40 (see Carmine).
Red oil (see Oleic acid).

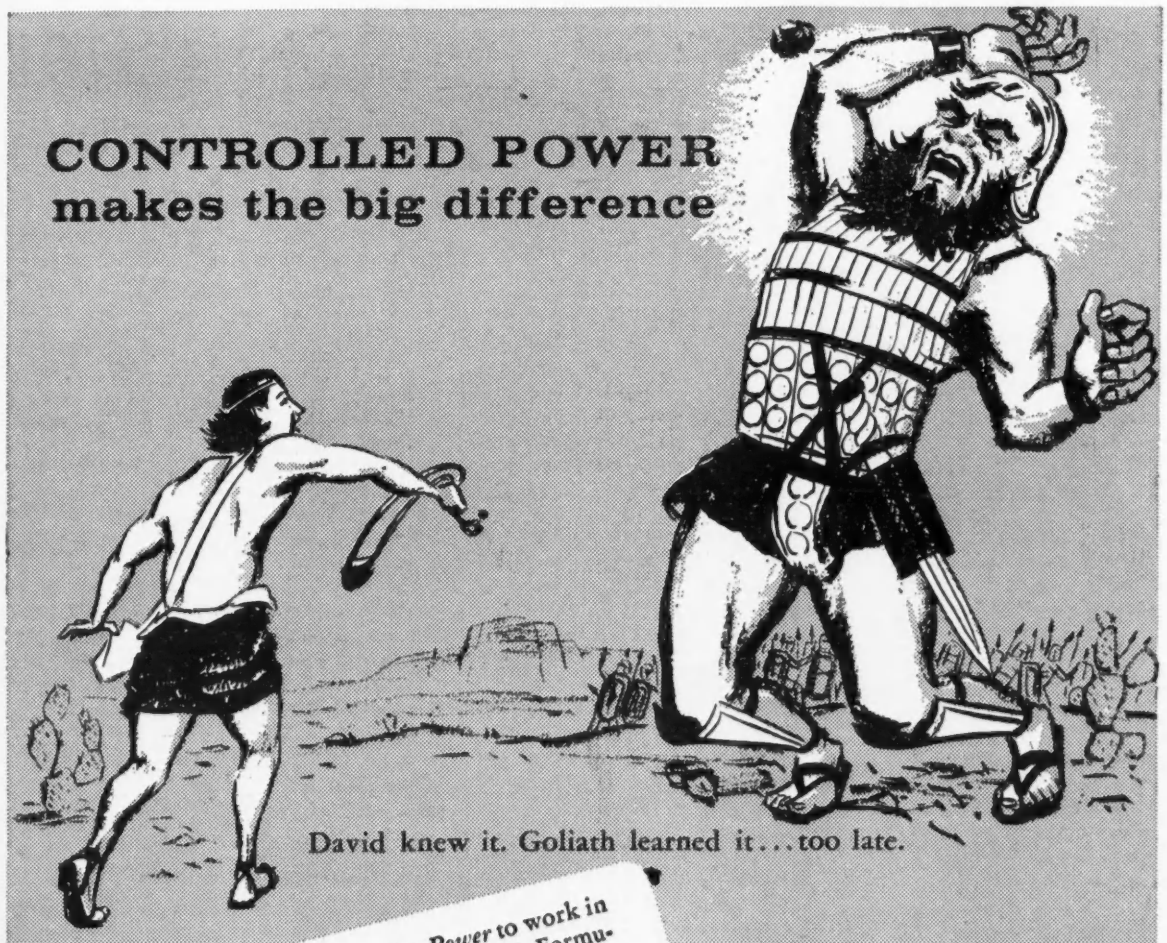
Red Pigments

Red pigment quotations, formerly grouped under one heading, are now listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Red, saunders, NF, powd., bbls lb. .35 - .40
Reserpine, cryst., bots gram. 2.40 - —
Resorcinol, tech. grade, dms., c.l., works, frt. equald lb. .77½- —
dms., l.c.l., same basis lb. .78½- —
USP, cryst., dms., works lb. 2.75 - —
powd., dms., works lb. 2.95 - —
Resorcinol monoacetate, NF, dms. lb. 3.00 - 3.25
Rhatany root, bgs. lb. .15 - .16
Rhodamine red toner, molybdated, PMA, kgs lb. 5.80 - —
Tungstated, PTMA, works, kgs lb. 6.60 - —
Rhodinol, 5-lb. cans lb. 32.00 -36.00
Rhubarb root, India, whole, bgs lb. .30 - —
powd., bbls. lb. .38 - —
Riboflavin, USP, bots., dlvd kilo. 65.00 - —
USP, readily soluble, bots., dlvd. kilo. 130.00 - —
Riboflavin 5'phosphate-sodium, bots., 100-kilo. lots or more. kilo. 125.00 - —
Rice bran oil, clarif., dms., l.c.l. lb. .18 Nom.
Clarif., tanks, dlvd. E lb. .15 - .15½
Rice starch (see Starch, rice).
Ricinoleic acid (see Castor oil acids, split).
Rochelle salt (see Potassium-sodium tartrate).
Roofing pitch (see Coaltar pitch, roofing).
Rose oil, nat., Bulgarian, bots oz. 40.00 -47.50
Rosemary oil, Spanish, NF, cns., dms lb. .70 - 1.00
Spanish, tech., cns., dms. lb. .50 - .70
Rosin, gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works, unit-lb. .12 - —
resin, 25-45%, fib. dms., works, unit-lb. .12 - —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs., ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, tanks, Calif. ex tax, San Francisco gal. .178 - —
tanks, east coast, N. J., N. Y. gal. .19 - —
tanks, group 3 gal. .13875- —
Rue oil, bots. lb. 2.00 - 2.50
Rutin, NF, fib. dms., 10 kilo lots. kilo. 17.00 - —
fib. dms., 5 kilo lots kilo. 17.50 - —
fib. dms., 1 kilo kilo. 18.50 - —
Ryania, 100%, powd., bgs., c.l., works lb. .22 - —
bgs., l.c.l., same basis lb. .24 - —

S

S acid, bbls., works lb. 3.25 - —
Sabadilla seed, activated, ground with lime, bbls. lb. .30 - .32
Powd., bbls lb. .49 - .49¼
Saccharin, calcium, fib. dms., 1,000-lb. lots, works lb. 2.50 - —
USP, cryst., soluble, dms., 1,000-lb. lots lb. 1.60 - —
dms., smaller lots lb. 1.70 - 1.80
USP, powd., soluble insoluble, dms., 1,000-lb. lots lb. 1.65 - —
dms., smaller lots lb. 1.75 - 1.95
Safflower oil, dms., New York lb. .1785- .1835
tanks, same basis lb. .1585- —
Saffron, Spanish, USP, tins lb. 45.00 - —
Safrol, dms. lb. .90 - 1.05
Sage, Cretan, bgs. lb. .11 - —
Dalmatian, bgs. lb. .44 - —
Italian lb. .26 Nom.
Sage oil, clary, bots lb. 35.00 - —
Dalmatian, cns. lb. 4.75 - —
Spanish, cns. lb. 1.20 - 1.45
Sago flour, raw, bgs. lb. .07 - .07¼
Refd., bgs. lb. .08½- .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms. lb. 1.05 - 1.15
Salicylic acid, crude, fib. dms., c.l., frt. alld lb. .35 - —
fib. dms., l.c.l., frt. alld. on 100 lbs. or more lb. .36 - —
Sublimed, tech., fib. dms., c.l., dlvd lb. .37 - —
fib. dms., l.c.l., dlvd lb. .41 - —
USP, cryst., fib. dms. lb. .50 - —
powd., fib. dms. lb. .57 - —
Salol, NF, gran., bbls., kgs. lb. 1.20 - —
Powdered salol, 25c. per lb. higher.
Salt, rock, paper bgs., c.l., 100 lbs. 1.07 - —
Table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.32 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton. 28.00 - —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indian, chips bgs. .65 - .66
East Indian, powd., fib. dms lb. .75 - .76
Sandalwood oil, cns. lb. 17.00 - —
Sardine oil, crude, tanks, Pac. coast. lb. .08½- .08¾
Sassafras oil, artif., dms. lb. .50 - .62
Nat., dom., dms. lb. 1.45 - 2.10
Sassafras oil, Brazilian (see Ocotea cymbarum oil).
Savin oil, cns lb. 2.75 - —
Savory oil, cns. lb. 4.25 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .95 - —
Powd., bgs., frt. alld., 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 13.50 -16.50
Sebacic acid, purif., dms., c.l., works lb. .64 - —
dms., l.c.l., works lb. .66 - .70
Seidlitz mixture, fib. dms., 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 12.00 - —
Senega root, bls. lb. 2.90 - 3.00
Senna leaves, Alexandria, whole and half, bls lb. .19 - —
siftings lb. .17 - —
pods, bls. lb. .14 - —
Tinnevelly, No. 1, bls. lb. .16 - .18
No. 2, bls. lb. .13 - .15
No. 3, bls. lb. .11 - .13
powd., bbls., bxs. lb. .15 - —
Serpentaria root, bls lb. 7.50 - —



David knew it. Goliath learned it... too late.

You can put *Controlled Cleaning Power* to work in your industrial cleaners and detergents. Formulate them with...

Cowles® DRYMET®
ANHYDROUS SODIUM METASILICATE

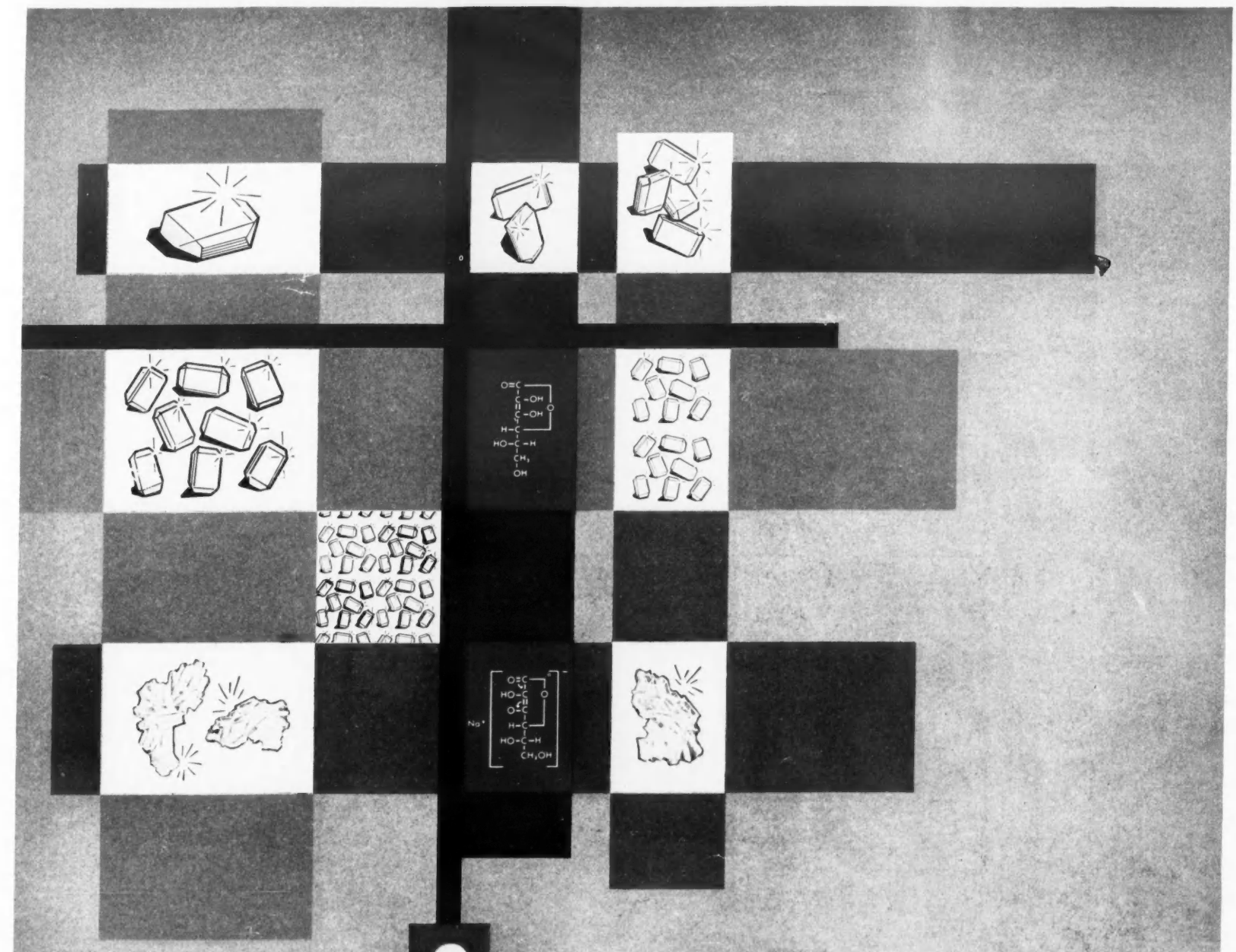
Your cleaners will have—
more soil-loosening power because DRYMET is so highly concentrated
more soil-dispersing power because DRYMET is so highly colloidal
more "staying" power because DRYMET provides a reserve of buffer capacity

Let Cowles DRYMET help you with your formulating problems. Get this DRYMET File Folder for Technical Data.

SEND THIS COUPON

Cowles Chemical Company
7018 Euclid Avenue
Cleveland 3, Ohio
Send me a Drymet File Folder.
Name
Company
Address
City State

Cowles CHEMICAL COMPANY
CLEVELAND 3, OHIO



VITAMIN C COMES RIGHT FROM ROCHE

You get vitamin C "by the tons" from Roche.

l-Ascorbic acid so produced by Roche care and skill is identical chemically and biologically with nature's product. It is pure and beneficial.

For remedying widespread nutritional deficiencies, vitamin C 'Roche' needs little proof of performance in supplementing diets. Its excellence is accepted—its efficacy established.

Food freezers and packers, seeking ways to make their good foods better, will gain by using 'Roche' ascorbic acid. Pharmaceutical manufacturers, too, can put their full reliance on Roche for pure vitamin C, made to U.S.P. standards, delivered promptly in protective packaging.

Roche, the headquarters of vitamin C knowledge since 1937, has a wealth of information and expert technical help. Make it work for you.

ORDER right . . . ORDER from Roche

VITAMIN DIVISION

HOFFMANN-LA ROCHE INC.

NUTLEY 10, NEW JERSEY, NUTLEY 2-5000 • NEW YORK: OXFORD 5-1400

VITAMIN C

Laboratory Data Sheet

ROCHE

l-ASCORBIC ACID, U.S.P.
COATED *l*-ASCORBIC ACID—97.5%
SODIUM *l*-ASCORBATE

- The first to achieve commercial production of vitamin C by the famous Reichstein synthesis.
- Roche produces every useful type of *l*-ascorbic acid to meet virtually every manufacturing need.
- Single uniform lots as high as 3000 kilos, saving you assay costs.
- All types are uniform, readily soluble and easy to handle.
- Roche guarantees highest quality, held to rigid specifications.
- Quick delivery from strategically located warehouses.
- Packaged to protect original quality in sealed tamperpruf containers.

l-ASCORBIC ACID, U.S.P. 'Roche'

TYPES	DESCRIPTION AND USES
GRANULAR TYPE 20-60	100% (±) passes through 20 mesh. 95% is retained on 60 mesh. Similar to granulated sugar in particle size. Satisfactory for direct addition to dried granulations.
FINE GRANULAR TYPE 40-80	100% (±) passes through 40 mesh. 95% is retained on 80 mesh. A free-flowing product similar to table salt in particle size. Recommended for tablet granulations where fine powder is considered less suitable because of denser packing.
SUPERFINE GRANULAR TYPE 60-100	100% (±) passes through 60 mesh. Approximately 25% remains on 100 mesh. 45-50% passes through 100 mesh and remains on 200 mesh. 25-35% passes through 200 mesh. A very fine free-flowing crystal suitable for dry gelatin capsules or tableting. Useful in dry mixtures, food supplements.
FINE POWDER TYPE 100	100% (±) passes through 100 mesh. Produced by grinding crystalline material. Non-abrasive on tableting dies. Widely used for granulations, solutions, food supplements. Minimizes fractionation of particles in dry mixtures.
ULTRA FINE (MICRO) POWDER TYPE 325	Minimum 99% through 100 mesh. Minimum 90% through 200 mesh. Milled extremely fine. Practically devoid of abrasive action on cutting dies. Screen tests above 200 mesh are unreliable because of variations in technique, equipment, humidity, static charges, etc. Sedimentation tests and measurement of particle size in microns reveal that 60-70% of Roche material is smaller than 44 microns (equivalent to 325 mesh).
AMPUL TYPE	Very fine crystals—easily dissolved. Minimum color. Specially produced and tested for use in parenteral solutions. See Roche technical brochure "Notes on Vitamin B_1 and Vitamin C Parenteral Solutions" for complete details.
TYPE F	Especially produced for use in the food industry. Free-flowing, will not dust or clump, dissolves easily. U.S.P. in quality. 100% through 50 mesh. 98-99% remains on 200 mesh.

COATED *l*-ASCORBIC ACID—97.5% 'Roche'

DESCRIPTION

Coated ascorbic acid 97.5% 'Roche' is a fine, white, or nearly white powder. It is pure U.S.P. ascorbic acid powder coated with ethyl cellulose. The manufacture of coated ascorbic acid is licensed under Patent No. 2,410,417 to Roche and customers of Roche.

SPECIFICATIONS

Particle Size	100% through 16 mesh screen 75-92% through 40 mesh screen 45-80% through 60 mesh screen 35-60% through 100 mesh screen
Assay	Minimum 97.5% *l*-ascorbic acid
Identity test	Positive for *l*-ascorbic acid
Loss on drying	Negligible

USES AND DATA

Ethyl cellulose coated ascorbic acid 'Roche' has these advantages in pharmaceutical tablet manufacture:

- Small size, high potency (250-500 milligrams) tablets of light color can be made from dry granulations with very little excipient.
- Aids in eliminating chipping and capping during compression.
- Retards discoloration, mottling during abnormal storage conditions.
- Reduces contact of ascorbic acid with reactive materials.
- Rapidly available in aqueous solution for assay.
- Provides a tablet with slower release of ascorbic acid, tending to reduce localized acidity sometimes experienced with high potency tablets.

FOOD MANUFACTURERS

- Manufacturers of cured meats can use this type to advantage for retarding smokehouse activity, and for better protection in spice mixtures. It may also provide longer protection of color and flavor during storage and display.

DATA ON PARTICLE FINENESS

Based on U.S.P. XV pages 934-5, N.F. 10, pages 702-3; *Langes Handbook of Chemistry 9th Edition, page 911

The fineness of "powders" is described in both the U.S. Pharmacopeia and National Formulary in terms which are related to the number assigned to a standard sieve made of woven wire cloth. The size of wire, and sieve opening are standardized together with permissible variation in both average and maximum openings.

Sieve Number	Sieve Opening in Microns	Sieve Opening Mm.	Permissible Variation in Average Opening Per Cent	Permissible Variation in Maximum Opening Per Cent	Wire Diameter Mm.
50	297	0.297	± 5	± 25	0.170-0.253
100	149	0.149	± 6	± 40	0.096-0.125
200	74	0.074	± 7	± 60	0.045-0.061
*325	44	0.044	± 5	± 60	0.036

Standards are established for defining the fineness of powdered chemicals, together with a technique for determining the uniformity of fineness. The types of powders described in the U.S. Pharmacopeia and National Formulary do not represent the full range of particle sizes commercially available. No procedure is given for the determination of particle size in the "ultra-fine" or "micro powder" range, sometimes referred to as No. 325. This requires a sedimentation method and measurement in microns. Ordinary sieving methods are inaccurate.

The variation possible in the standard sieves plus such variables as the motion applied to the screen and physical characteristics of the powder being screened affect accuracy and duplicability of screening tests. Particle size specifications based on mesh sizes must always be regarded as nominal rather than as strictly accurate limits of particle size and distribution.

SODIUM *l*-ASCORBATE** 'Roche'

This is the sodium salt of *l*-ascorbic acid. It is available as an odorless, tasteless, anhydrous, fine white powder or fine granular substance.

The antiscorbutic activity is in molecular proportion to *l*-ascorbic acid, one milligram of the sodium salt being equivalent to 0.889 milligram of the acid, or one milligram of the acid equivalent to 1.124 milligrams of sodium *l*-ascorbate.

Highly soluble in water—62 grams 100 ml at 25°C, 78 grams 100 ml at 75°C. Aqueous solutions are unstabile, easily oxidized on exposure to air, or other factors which affect *l*-ascorbic acid.

The pH of a sodium *l*-ascorbate solution is from 5.6 to 7.+ as compared with a pure *l*-ascorbic acid solution at pH 2.3-2.5. The more neutral characteristic of the sodium salt recommends it for high dosage oral forms where gastric sensitivity to lower pH might be undesirable. It is useful in combination with ingredients which would react unfavorably under more acid conditions. Products can be buffered to a suitable pH by combining sodium *l*-ascorbate and ascorbic acid together.

Commercial forms of sodium *l*-ascorbate are not recommended for preparation of parenteral solutions. It is more satisfactory to prepare suitably buffered solutions of 'Roche' ampul type *l*-ascorbic acid, using sodium bicarbonate according to the special Roche method described in our technical brochure, "Notes on Vitamin B_1 and Vitamin C Parenteral Solutions."

Sodium *l*-ascorbate is of value as an antioxidant for use in comminuted meats and in curing pickles for hams, bacon, and corned beef. Because it is the salt of *l*-ascorbic acid (vitamin C), a substance naturally occurring in meats and identified in the U.S. Pharmacopeia, it may be preferred to antioxidants in the "chemical additive" class.

THESE PRODUCTS ARE FOR ANTIOXIDANT USE ONLY. IF USED IN FOOD PRODUCTS, NO CLAIM FOR NUTRITIONAL VALUE CAN BE MADE.

****Sodium d-isoascorbate, 'Roche'**, antioxidant with virtually no vitamin C activity. A white, free-flowing crystalline material. Slightly less soluble than *l*-ascorbic compounds. When replacing *l*-ascorbic acid, 23% more should be used to obtain equal antioxidant activity and 8% more when replacing sodium *l*-ascorbate. These differences are due to the presence of both sodium and water of crystallization which are inactive. Literature on request.

d-Isoascorbic acid 'Roche'—antioxidant. Similar to sodium d-isoascorbate described above. Useful where acid reaction or absence of sodium is desirable. 10% less than sodium d-isoascorbate or 10% more than *l*-ascorbic acid (because of water crystallization) is required for equivalent antioxidant activity.

VITAMIN DIVISION • **HOFFMANN-LA ROCHE INC.** • NUTLEY 10, NEW JERSEY

Pacific Coast distributor: L. H. Butcher Company, San Francisco, Los Angeles, Seattle, Portland, Salt Lake City • In Canada: Hoffmann-La Roche Ltd., 286 St. Paul Street, West, Montreal, Quebec

(Reprints available)

Sesame oil, USP, dms.	lb.	.38	.39
Sesame seed, Egyptian, hulled, bgs.	lb.	.22½-	—
nat., bgs.	lb.	.17	—
Nicaragua, hulled, shipt., bgs.	lb.	.25	—
nat., bgs.	lb.	.16½-	—
Salvadorian, nat., bgs.	lb.	.21½-	—
Indian, nat., bgs.	lb.	N.P.	
Shellac, bleached, bonedry, bgs., 2,500-lb. lots	lb.	.50	—
bbls., 1,500-lb. lots	lb.	.51	—
kgs., 1,500-lb. lots	lb.	.52	—
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.			
Shellac, refd., bgs., 1,500-lb. lots	lb.	.60	—
bbls., 1,500-lb. lots	lb.	.61	—
kgs., 1,500-lb. lots	lb.	.62	—
Refd., lemon No. 1, bgs., 10-bg. lots	lb.	.39	.41
lemon No. 2, bgs., 10-bg. lots	lb.	.37	—
superfine, bgs., 10-bg. lots	lb.	.36	—
TN, bgs., 10-bg. lots	lb.	.35	Nom.
Shellac in 1 to 10-bg. lots 1c. per lb. more.			
Shingle stain oil, tar distillate, dms., c.l., works	gal.	.35	—
dms., l.c.l., works	gal.	.44	—
tanks, works	gal.	.23	—
Sienna pigment, burnt, paper bgs., c.l., works	lb.	.06¼-	.17¼
paper bgs., l.c.l., works	lb.	.06½-	.17½
Raw, paper bgs., c.l., works	lb.	.06¼-	.16¼
paper bgs., l.c.l., works	lb.	.06½-	.16½
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works	ton.	25.00	—
bgs., l.c.l., works, ex whse.	ton.	45.00	-55.00
Hard-quartz, 99½%, 325 mesh, bgs., c.l., works	ton.	20.00	—
bgs., l.c.l., works	ton.	25.00	—
99½%, 140 mesh, bgs., c.l., works	ton.	15.00	—
bgs., l.c.l., works	ton.	20.00	—
Silicon tetrachloride, tech., dms., c.l., works	lb.	.18	—
dms., l.c.l., works	lb.	.22	.30½
tanks, works	lb.	.17	—
Silver bullion, ingots, cs.	Troy oz.	.91⅜-	—
Silver cyanide, fib. dms., 2,500-oz. lots	oz.	.87	—
fib. dms., 1,000-oz. lots	oz.	.87⅜-	—
fib. dms., 500-oz. lots	oz.	.87½-	—
fib. dms., 100-oz. lots	oz.	.87¾-	—
Silver nitrate, CP, cryst., bots., 2,500-oz. lots	oz.	.62⅜-	—
bots., 1,000-oz. lots	oz.	.63½-	—
bots., 500-oz. lots	oz.	.64⅛-	—
bots., 250-oz. lots	oz.	.64⅜-	—
USP granular silver nitrate 4c. per oz. higher.			
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots	oz.	1.15	—
Strong, NF, bots., dms., 1,000-oz. lots	oz.	1.10	—
Snakeroot oil, Canada, cns.	lb.	No stocks.	
Soapbark, crushed, bls.	lb.	.45	—
Powd., bls.	lb.	.45	—
Whole, bls.	lb.	.38	.40
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs.		1.90	—
paper bgs., l.c.l., stock pts. 100 lbs.		3.00	- 4.77
bulk, c.l., works 100 lbs.		1.60	—
Light, 58%, paper bgs., c.l., works 100 lbs.		1.85	—
paper bgs., l.c.l., stock pts. 100 lbs.		3.95	- 4.72
bulk, c.l., works 100 lbs.		1.55	—
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs.		4.70	—
Liq., 50%, sellers' tanks, works, dry basis 100 lbs.		2.90	—
50%, rayon type, sellers' tanks, works, dry basis 100 lbs.		2.90	- 3.00
73%, sellers' tanks, works, dry basis 100 lbs.		3.00	—
73%, rayon type, sellers' tanks, works, dry basis 100 lbs.		3.00	- 3.10
Solid, 76%, dms., c.l., works 100 lbs.		4.30	—
Soda, sal, conc., bgs., c.l., works, 100 lbs.		2.50	—
smaller lots, works 100 lbs.		2.80	—
Sodium acetate, anhyd, bgs., c.l., frt. equald	lb.	.13	—
bgs., l.c.l., frt. equald	lb.	.13¾-	—
NF, 60%, gran., dms., c.l., works	lb.	.14	—
dms., l.c.l., works	lb.	.15½-	—
Sodium alginate, NF, white powd., dms., 300 lbs. or more	lb.	.93	—
Sodium p-aminobenzoate, dms., 1,000-lb. lots or more	lb.	2.35	—
dms., smaller lots	lb.	2.45	- 2.55
Sodium p-aminosalicylate, dms., 100-lb. lots or more, frt. adjusted	lb.	2.70	—
Sodium antimoniate, bbls., c.l., dlvd. E	lb.	.28	—
bbls., l.c.l., dlvd. E	lb.	.29½-	—
Sodium arsenate, 45% arsenic pentoxide, dms., c.l., works.	lb.	.12½-	—
dms., l.c.l., works	lb.	.13¾-	.14½
Sodium arsenite, 90%, pink powder, 75% arsenious oxide, dms., works	lb.	.12¼-	—
dms., l.c.l., works	lb.	.13	.14½
Soln., dms., works	gal.	.59	.67
Sodium ascorbate, dms., 25-50 kilo lots	kilo.	12.00	—
dms., 10-kilo lots	kilo.	12.35	—
dms., 5-kilo lots	kilo.	12.75	—
dms., 1-kilo lots	kilo.	13.00	—
bots., 500-gram lots	gram.	.0135-	—
Sodium benzoate, tech., bbls., dms., 100-lb. lots or more	lb.	.39	—
USP, bbls., dms., 100-lb. lots or more	lb.	.46	—
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs.		2.95	—
bgs., l.c.l., works 100 lbs.		3.85	—
USP, powd., bgs., c.l., works, 100 lbs.		2.55	—
bgs., l.c.l., works 100 lbs.		3.45	—
Sodium bichromate, gran., bgs., c.l., t.l., works	lb.	.13	—
bgs., l.c.l., works	lb.	.13½-	.14¾
Sodium bifluoride, bbls., c.l., works, frt. equald	lb.	.19½-	—
bbls., l.c.l., same basis	lb.	.1990-	—
Sodium bisulfate, bulk, c.l., works 100 lbs.		2.00	—
dms., c.l., frt. equald 100 lbs.		3.00	- 3.60
dms., l.c.l., frt. equald 100 lbs.		3.50	- 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs.		5.00	—
bgs., l.c.l., works 100 lbs.		5.40	—
Soln., 35°, bbls., c.l., works, 100 lbs.		1.70	—
bbls., l.c.l., works 100 lbs.		2.20	—
Sodium borate (see Borax).			
Sodium bromide, USP, bbls., works,	lb.	.40	—
Sodium carboxymethyl cellulose (see CMC).			
Sodium carbonate, cryst., monohydrated (see Soda, sal).			
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs.		3.10	—
bgs., l.c.l., works 100 lbs.		3.50	—
Sodium chlorate, cryst., dms., c.l., works	lb.	.09	—
dms., l.c.l., works	lb.	.09½-	.10½
Sodium chloride, tech. (see Salt).			
Sodium chloride, USP, gran., bgs.	lb.	.03	—
Sodium chlorite, tech., dms., c.l., works	lb.	.58	—
dms., 20-ton lots or more works.	lb.	.66	—
dms., smaller lots, works	lb.	.70	.73
Sodium chloroacetate, tech., dms., c.l., works	lb.	.27	—
dms., l.c.l., works	lb.	.28	—
Sodium chromate, anhyd., fib. dms., c.l., t.l., works	lb.	.14¾-	—
fib. dms., l.c.l., works	lb.	.15¼-	.16½
Tetrahydrate, bgs., c.l., t.l., works.	lb.	.1015-	—
bgs., l.c.l.	lb.	.1065-	.1190
Sodium citrate, anhyd., dms.	lb.	.62	—
NF VIII, gran., dms	lb.	.26½-	.27½
USP, XIV, gran., dms	lb.	.29½-	.30½
Sodium citrate, USP, powd. prices ½c. higher.			
Sodium cyanate, dms., 1,000-lb. lots, works	lb.	.85	—
dms., smaller lots, works	lb.	.90	- 1.10
Sodium cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots	lb.	.193	—
dms., over 1,000-lb. lots	lb.	.203	—
dms., 100-lb. to 1,000-lb. lots.	lb.	.213	—
Gran. sodium cyanide 1c. higher.			
Sodium diacetate, 33-35% acidity, 250-lb. dms., works	lb.	.15	—
250-lb. dms., l.c.l., works	lb.	.15¾-	—
Anhyd., dms., c.l., works	lb.	.18	—
dms., l.c.l., works	lb.	.18¾-	—
Sodium ferrocyanide, bgs., 10-ton lots	lb.	.13½-	—
bgs., smaller lots	lb.	.14	—
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390-	—
fib. dms., l.c.l., works, frt. equald	lb.	.1430-	—
Sodium formate, bgs., c.l., works, 100 lbs.		7.60	—
bgs., l.c.l., works 100 lbs.		8.65	—
Sodium gentisate, 100-lb. fib. dms.	lb.	5.50	—
Sodium gluconate, refd., dms.	lb.	.80	.83
Tech., dms.	lb.	.35	—
Sodium hydride, powd., dms., works.	lb.	1.90	- 2.75
Sodium hydrosulfide (see Sodium sulfhydrate).			
Sodium hydrosulfite, dms., c.l., frt. alld.	lb.	.24	—
dms., l.c.l., frt. alld.	lb.	.24½-	—
Sodium hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots.	lb.	.23½-	.28
Sodium hydroxide, tech. (see Soda, caustic).			
Sodium hypophosphite, NF, dms., 1,000-lb. lots	lb.	.97	—
Sodium hyposulfite, anhyd., photo grade, bgs., c.l., works, 100 lbs.		8.05	—
bgs., l.c.l., works 100 lbs.		8.45	—
Anhyd., tech., bgs., c.l., works, 100 lbs.		7.25	—
bgs., l.c.l., works 100 lbs.		7.65	—
Hexahydrate, pea, cryst., bgs., c.l., works 100 lbs.		5.15	—
bgs., l.c.l., works 100 lbs.		5.55	—
photo grade, bgs., c.l., works, 100 lbs.		7.75	—
bgs., l.c.l., works 100 lbs.		8.05	—
Pentahydrate, tech., bgs., c.l., works 100 lbs.		5.15	—
bgs., l.c.l., works 100 lbs.		5.55	—
Sodium iodide, USP, bots., dms.	lb.	2.55	—
Sodium lactate, edible, 60%, cbys., dms., works	lb.	.26½-	—
Sodium lauryl sulfate, dms., c.l., dlvd.	lb.	.19	—
dms., l.c.l., dlvd.	lb.	.19½-	.20¾
tanks, dlvd.	lb.	.18	—
Sodium metabisulfite (see Sodium bisulfite).			
Sodium metaborate, octahydrate, gran., bgs., c.l., works.	ton.	87.00	—
bgs., ton lots, ex whse.	ton.	143.00	—
bgs., smaller lots, ex whse.	ton.	148.00	—
Tetrahydrate, dms., c.l., works.	ton.	204.00	—
dms., ton lots, ex whse.	ton.	242.50	—
dms., smaller lots ex whse.	ton.	247.50	—
Sodium, metallic, bricks, 14,000-lb. lots or more, works	lb.	.19½-	—
Fused, 14,000-lb. lots or more, works	lb.	.19	—
tanks, works	lb.	.17	—
Sodium metanilate, bbls., frt. alld.	lb.	.62	—
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs.		5.70	—
bgs., l.c.l., works 100 lbs.		6.15	- 8.10
dms., c.l., works 100 lbs.		6.20	—
dms., l.c.l., works 100 lbs.		6.65	- 8.55
Sodium metasilicate, pentahydrate, bgs., c.l., works 100 lbs.		4.45	—
bgs., l.c.l., works 100 lbs.		4.85	- 6.75
dms., c.l., works 100 lbs.		4.95	—
dms., l.c.l., works 100 lbs.		5.35	- 7.25

Helpful Answers to Caustic Questions

As a leading supplier of Caustic Soda, Columbia-Southern is asked many questions each month about this versatile "workhorse" alkali. While the answers probably are not completely new to every Caustic user, they do re-emphasize certain basic points that shouldn't be forgotten. We hope that you will find this series interesting and helpfully informative.

In how many different forms does Caustic come?

The four commonest forms of Caustic are anhydrous solid and flake (available in several particle sizes), and liquid concentrations of 50% and 73% strengths.

How can I determine my most economical Caustic buy?

So much depends on individual processing requirements that any flat answer might be misleading. The most important cost factors for your consideration are the purchase price of the material, transportation costs, unloading costs, labor costs for process handling, and investment cost of equipment required for unloading, storage and process handling. In general, equipment for handling solid or flake Caustic will be least costly, that required for 50% liquor next, and the equipment for handling 73% more expensive. Handling costs per ton of NaOH, however, will be in exactly the reverse order.

A more thorough way to get a clear cost picture of the best Caustic for your needs is to contact Columbia-Southern for the prompt services of our experienced Caustic Soda specialists. Just call, write or wire our Pittsburgh address . . . at no obligation, of course.

Is Caustic dangerous to handle?

Like most other chemicals, Caustic merits proper respect. Shipping improvements like the tank car dome platform (first standardized for all Caustic shipments by Columbia-Southern) have made unloading and initial handling much safer than in the past. As an elementary precaution, fast-valve showers and eye fountains should be readily accessible to all personnel who might come into contact with Caustic. Columbia-Southern will be happy to mail you copies of our up-to-date booklet, *Unloading and Handling Caustic Soda.* This handbook covers in detail such basic points as use of proper protective clothing, inspection of storage and piping facilities, tank car handling, steaming and dissolving procedures, complete stocking of First Aid cabinets, and the like.

Has Caustic Soda been used for a long time?

Caustic has one of the longest chemical pedigrees known. Various authorities agree in placing its earliest use among the Egyptians, who used the alkali in making cleansers. These ancient peoples produced Caustic, or lye, by utilizing the action of lime on solutions of plant ash sodas. Causticizing was effected cold, in the presence of a small amount of water, with the lye gradually separated by filtration through a cloth.

Is there more than one basic method of producing Caustic Soda today?

Yes. In the most popular electrolytic method, an electric current is passed through a sodium chloride brine solution contained in specially designed cells. Chlorine gas forms at the cell's anode, and a Caustic Soda solution collects at the cathode. This low concentration liquor is evaporated to yield the various commercial concentrations desired. The older lime-soda method of manufacture, not far removed in theory from the Egyptian process, utilizes the treatment of a soda ash solution with slaked lime. The resulting chemical reaction produces a weak Caustic Soda solution and a precipitate of Calcium Carbonate, which is filtered out. As in the electrolytic method, the Caustic solution is evaporated and purified to obtain commercial concentrations.

BIG SPLASH SAVES CUSTOMERS' DOLLARS. Advanced-design Columbia-Southern barges like the big beauty below carry Caustic along inland waterways, do a better job of protecting cargo purity, and unload more quickly and easily. Can you accept economical water delivery?

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Cincinnati • Charlotte • Chicago
Cleveland • Boston • New York • St. Louis
Minneapolis • New Orleans • Dallas • Houston
Pittsburgh • Philadelphia • San Francisco
IN CANADA: Standard Chemical Limited and its Commercial Chemicals Division

Sodium Molybdate—Soybean Meal

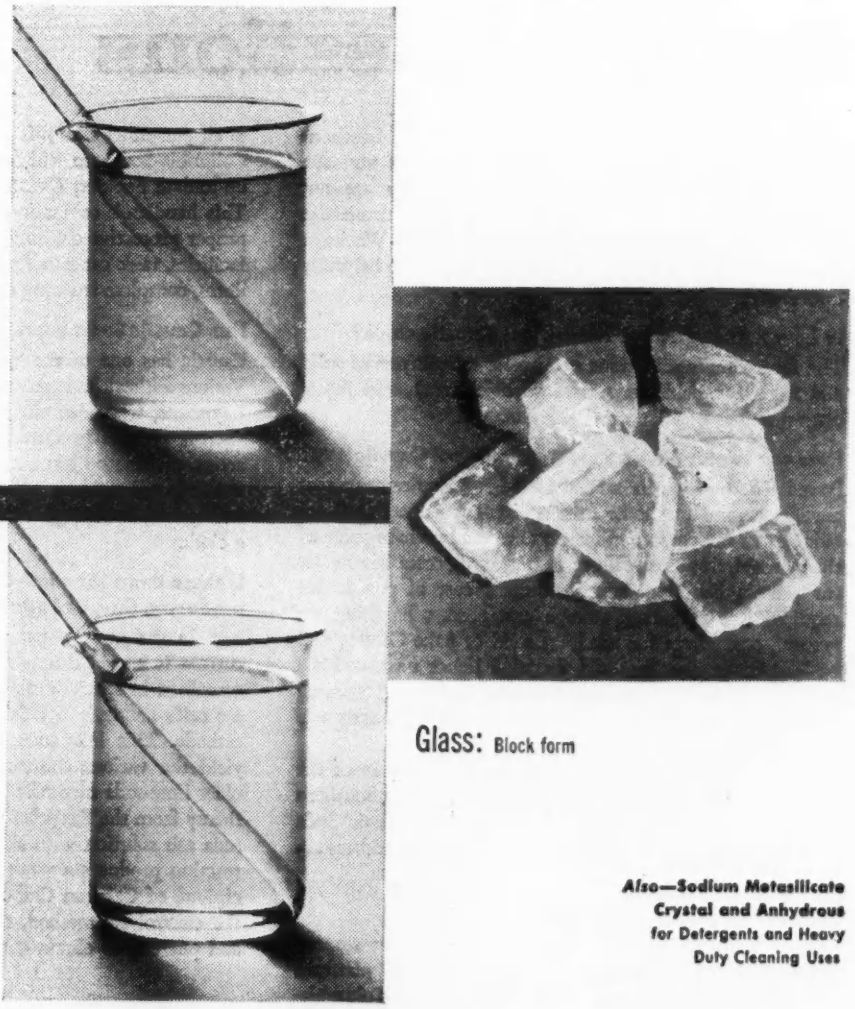
Sodium molybdate, anhyd., dms., works, frt. equald lb. .92 - .96
Cryst., dms., works, frt. alld lb. .73 - .74
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate monohydrated).
Sodium naphthionate, bbls lb. .70 - —
Sodium nitrate, dom., crude, bgs., c.l., works ton.47.00 - —
bulk, c.l., works ton.43.50 - —
Imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton.49.50 - —
bulk, c.l., same basis ton.46.00 - —
Sodium nitrate, USP, bbls., c.l., works, frt. equald 100 lbs. 8.50 - —
bbls., l.c.l., same basis 100 lbs.10.50 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms., l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works, 100 lbs. 5.65 - —
bbls., l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 88% bgs., works, 100 lbs.10.85 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, bgs., c.l., works, frt. equald lb. .26 - —
bgs., l.c.l., same basis lb. .27½- .34
Pellets, bgs., c.l., same basis lb. .26 - —
bgs., l.c.l., same basis lb. .27½- .34

Sodium pentachlorate, powd., bgs., dms., c.l., same basis lb. .25 - —
bgs., dms., l.c.l., same basis lb. .26½- .33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.
Sodium perborate, NF, tech., bgs., c.l., works lb. .19 - —
bgs., l.c.l., works lb. .21 - —
Sodium peroxide, dms., c.l., t.l., dlvd. E. of Miss lb. .20½- —
dms., l.c.l., same basis lb. .21 - .21½
Sodium phenolsulfonate, USP IX, gran., dms lb. .48 - .49
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald, 100 lbs. 7.05 - —
bgs., l.c.l., works 100 lbs. 8.05 - 8.65
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., frt. equald 100 lbs. 8.10 - —
Dibasic, USP, dried powd. bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 - —
bgs., l.c.l., frt. equald 100 lbs. 9.10 - 9.70
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.65 - —
bgs., l.c.l., frt. equald 100 lbs. 9.05 - 9.65
Tribasic, cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.40 - —
bgs., l.c.l., frt. equald 100 lbs. 4.80 - 5.40
Sodium phosphate in dms., 60c. to 80c. higher than bgs.

Sodium prussiate, yellow (see Sodium ferrocyanide).
Sodium pyrophosphate, acid, bgs., c.l., works, frt. equald, 100 lbs.10.85 - —
bgs., l.c.l., works 100 lbs.11.60 -11.85
Ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½- —
bgs., l.c.l., frt. equald 100 lbs. 7.92½- 8.52½
Sodium salicylate, USP, dms lb. .78 - .80
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs. 4.10 - 4.35
bgs., l.c.l., dlvd. zone 2 100 lbs. 4.35 - 4.60
bgs., l.c.l., dlvd. zone 3 100 lbs. 4.75 - 4.90
bgs., l.c.l., dlvd. zone 4 100 lbs. 5.35 - 5.60
Sales zones are: (1) Atl. states E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones: Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sodium sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., l.c.l., works 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works, 100 lbs. 1.55 - —
dms., l.c.l., works 100 lbs. 1.90 - 2.40
tanks, works 100 lbs. 1.20 - —

Sodium silicate, liq., 47°Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs. 2.95 - 3.10
tanks, works 100 lbs. 1.90 - —
52° Be, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.65 - —
dms., l.c.l., works 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton.67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .075 - —
bgs., l.c.l., works lb. .079 - —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E lb. .633 - .692
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —
Sodium sulfate, NF VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton.52.00 - —
detergent, rayon grade, bgs., c.l., works ton.34.00 - —
bulk, c.l., works ton.31.00 - —
USP, cryst., fib. dms lb. .17½- .18
gran., fib. dms lb. .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06¾- —
dms., l.c.l., works lb. .07¾- —
Liq., 40-44%, tanks, works, 100% basis ton.120.00 - —
Sodium sulfide, flake, dms., c.l., works, E. frt. equald lb. .05½- —
dms., l.c.l., same basis lb. .06½- —
Fused, bbls., c.l., works, E., frt. equald lb. .05 - —
bbls., l.c.l., same basis lb. .06 - —
Sodium sulfite, anhyd., bgs., c.l. 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works lb. .04 - —
dms., l.c.l., works lb. .05 - —
Sodium thiocyanate, CP, dms lb. .55 - .65
Tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
dms., less than ton lots, works lb. .337 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Sodium thiosulfate, tech. (see Sodium hyposulfite).
Sodium titanate, ctns., c.l., works. lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton or less, works lb. .14¾- —
Sodium toluene sulfonate, dms., c.l. or t.l. lb. .38 - —
dms., l.c.l. lb. .42 - —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E. lb. .37½- —
100-lb. dms., l.c.l., frt. adjusted, E lb. .39½- —
50-lb. dms., c.l., frt. alld. E lb. .38 - —
50-lb. dms., l.c.l., frt. adjusted, E lb. .40 - —
10-lb. cns., c.l., frt. alld. E lb. .44 - —
10-lb. cns., l.c.l., frt. adjusted, E lb. .46 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½- —
bgs., l.c.l., same basis 100 lbs. 8.27½- 8.87½
Sodium trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
bgs., l.c.l., works 100 lbs. 9.40 - 9.80
dms., c.l., works 100 lbs. 9.05 - —
dms., l.c.l., works 100 lbs. 9.80 -10.20
Sodium tungstate, tech., kgs., dlvd. E lb. 2.15 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., c.l., dlvd. lb. .21 - —
dms., l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb. lots or more works lb. .23 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .35
Solvent naphtha, petroleum, partial aromatic, 205°-282° F. b.r., 41°C. m.a.p., tanks, New York, New Jersey gal. .215 - —
212°-278°F. b.r., 43°C. m.a.p., tanks, New Jersey gal. .26 - —
212°-284°F. b.r., 19°C. m.a.p., tanks, New Jersey gal. .29 - —
224°-280°F. b.r., 48°C. m.a.p., tanks, Houston gal. .215 - —
273°-361°F. b.r., 29°C. m.a.p., tanks, New Jersey gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p., tanks, Houston gal. .25 - —
287°-386°F. b.r., 31°C. m.a.p., tanks, New Jersey gal. .29 - —
310°-314°F. b.r., 13.5°C. m.a.p., tanks, Texas City gal. .33 - —
310°-348°F. b.r., 17°C. m.a.p., tanks, New York, New Jersey gal. .35 - —
320°-360°F. b.r., 10°C. m.a.p., tanks, New York, New Jersey gal. .33 - —
324°-349°F. 37°C., m.a.p., tanks, Houston gal. .33 - —
341°-390°F. b.r., 35°C., m.a.p., tanks, New Jersey gal .37 - —
352°-413°F. b.r., 30°C., m.a.p., tanks, Houston gal. .33 - —
358°-401°F. b.r., 25°C., m.a.p., tanks, New York, New Jersey gal. .39 - —
364°-404°F. b.r., 19°C., m.a.p., tanks, New York, New Jersey gal. .425 - —
367°-418°F. b.r., 19.6°C., m.a.p., tanks, New York, New Jersey gal. .33 - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .34 - —
fib. dms., smaller lots, works lb. .37 - .39
Sorbitan tristearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib. dms., smaller lots, works lb. .38 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 - .26
Powd., dms., 1 to 5-ton lots, works lb. .38 - —
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 -
dms., smaller lots, works lb. .25¼
tanks, works lb. .23¼
Soln., NF, reg., 70% aqueous, dms., c.l., works lb. .16 -
dms., ton lots, works lb. .16¾
dms., smaller lots works lb. .17 -
tanks, works lb. .15 - —
Soybean meal, 44% bulk, Decatur, ton.45.00 - —

WHICH sodium silicate suits your process best?



Opalescent Solutions

Baumé	Wt. Ratio (Na_2O to SiO_2)
38° Pearl	1:3.25
40° Regular	1:3.25
41° Acme	1:3.25
42.5° Ajax	1:3.25
47° Ideal	1:2.84
52°	1:2.40
60°	1:2.00

And other ranges of Baumés

Clear Solutions

Baumé	Wt. Ratio (Na_2O to SiO_2)
38° Crown	1:3.25
38° Gem	1:2.54
40° Peak	1:3.22
41° Water White	1:3.25
42° Silk	1:2.54
42.5° Water White	1:3.25
44° Perox	1:1.80
52° Zenith	1:2.40

And other ranges of Baumés

Glass: Block form

Also—Sodium Metasilicate Crystal and Anhydrous for Detergents and Heavy Duty Cleaning Uses

General Chemical offers every grade of SODIUM SILICATE

For any grade and any strength you need, see General Chemical! Solutions are supplied ready to use. No elaborate mixing equipment necessary. Special grades prepared to your specifications.

Solutions available in 55-gallon drums, tank cars and tank trucks. Glass shipped in bulk and bags. Consult your nearest General Chemical office for any special grades you may need.

Call or write today!

Basic Chemicals for American Industry

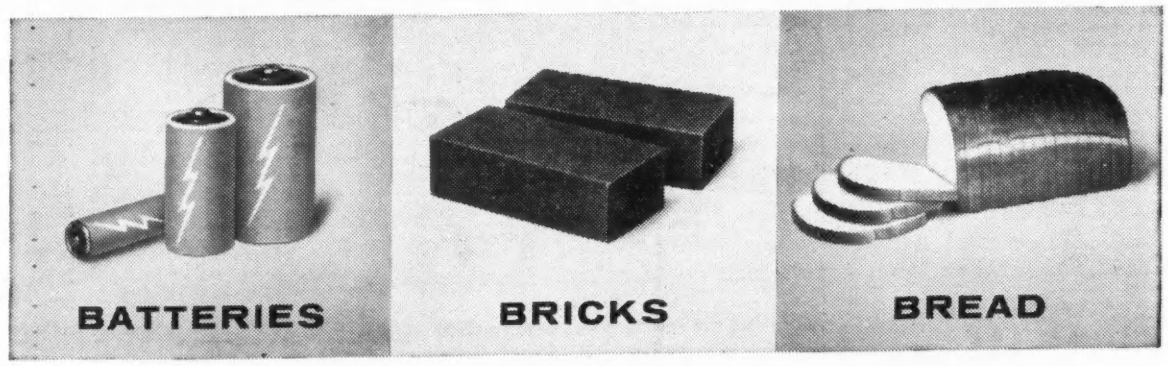
GENERAL CHEMICAL DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

Offices: Albany • Atlanta • Baltimore • Birmingham • Boston • Bridgeport • Buffalo • Charlotte • Chicago • Cleveland • Denver • Detroit • Greenville (Miss.) Houston • Jacksonville • Kalamazoo • Los Angeles • Milwaukee • Minneapolis • New York • Philadelphia • Pittsburgh • Providence • San Francisco • Seattle St. Louis • Yakima (Wash.) In Canada: The Nichols Chemical Company, Limited • Montreal • Toronto • Vancouver

Soybean oil, crude, tanks, Decatur, lb. .12¾- —
Foots, soapstock, acid 95% tanks, N. Y. lb. .07 - —
Refd., alkali, dms. lb. .1692- .1710
tanks lb. .1492- —
clarified, dms. lb. .1662- .1680
tanks lb. .1462- —
salad, dms. lb. .1718- .1730
tanks lb. .1518- —
Soybean oil acids, dbl. dist., dms. lb. .18¾- .20¾
tanks lb. .16¼- —
Single-distilled, dms lb. .17¼- .19¼
tanks lb. .15¼- —
Soybean pitch, dms., works lb. .05 - .05¼
Soybean protein, chemically isolated, bgs., c.l., works lb. .23 - —
Mechanically refd., bgs., l.c.l., works lb. .066 - —
Sparteine sulfate, cns. oz. .80 - .90
Spearmint leaves, dom., bls. oz. .75 - —
Spearmint oil, dms. lb. 4.25 - —
Sperm oil, bleached, winter, 45°, dms. lb. .1825- .1850
tanks lb. .1650- —
Nat., winter, 45°, dms. lb. .1725- .1750
tanks lb. .1550- —
Spermaceti wax, blocks, cs. lb. .31 - .34
Cakes, cs. lb. .32 - .36
Spruce extract, liq., reg. tanks, works lb. .01¾- —
Powd., super, bgs., c.l., works. lb. .05¼- —
bgs., l.c.l., works lb. .05½- —
Spruce oil, cns., dms lb. 2.80 - —
Squill, white, bls. lb. .16 - .18
White, powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .79 - .80
Stannic oxide, dms., dlvd. E lb. 1.05½- 1.06½
Stannous chloride, anhyd., dms., works lb. .915 - 1.409
Hydrous, cryst., dms., works lb. .80 - .81
Stannous sulfate, dms., works lb. 1.05 - 1.07
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.32 - —
paper bgs., l.c.l. 100 lbs. 7.47 - —
Powd., paper bgs., c.l. 100 lbs. 7.44 - —
paper bgs., l.c.l. 100 lbs. 7.59 - —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.
Starch, potato, dom., Idaho, bgs., c.l., works lb. .06½- —
Dom., Maine, bgs., c.l., works lb. .06¼- —
ex whse., New York lb. .08¼- .09¼
Starch, rice, bgs., l.c.l. lb. .15½- .16
Starch, wheat, bgs. lb. .08½- .09
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, dbl. pressed, bgs. lb. .15¼- .17¼
Single pressed, bgs. lb. .14¾- .16¾
Triple pressed, bgs. lb. .17½- .19½
Stearine, oleo (see Oleostearine).
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, western Pennsylvania. gal. .16 - —
tanks, group 3 gal. .12875- —
tankwagon, Boston gal. .20 - —
Chicago gal. .299 - —
Cleveland gal. .23½- —
Los Angeles, ex tax gal. .199 - —
Newark gal. .19 - —
New York gal. .19 - —
Philadelphia gal. .19½- —
Pittsburgh gal. .19 - —
Stramonium leaves, bgs. lb. .18 - .20
Streptomycin hydrochloride, bulk, gram. .0850- .0875
Streptomycin sulfate, bulk gram. .0850- .0875
Strontium bromide, NF, 150-lb. fib. dms lb. .84 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works. lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, bbls., works. lb. .46 - —
Strontium iodide, jars, 25-lb. lots. lb. 3.40 - —
Strontium nitrate, bgs., c.l., works. 100 lbs. 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms lb. 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton. 56.70 -66.15
Strophanthin G (see Ouabain, USP).
Strophanthin K, bots oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs. lb. 3.50 - 3.75
Styrax, USP, cs lb. .78 - .80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½- —
dms., l.c.l., same basis lb. .23½- —
tanks, same basis lb. .20½- —
Syn. rubber grade, 99%, dms., c.l., frt. alld lb. .18½- —
dms., l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 - —
Styrolyl acetate, bots lb. 1.45 - 1.70
Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs., refy., E. lb. .0885- —
Sucrose octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .76 - —
Sugar (see Sucrose).
Sugar cane wax, dom., refd., slabs, 80-lb. ctns., works lb. .65 - .75
80-lb. ctns., spot lb. .67¼- .72¼
Sulfabenzamide, dms lb. 4.00 - 4.50
Sulfabenzamide-sodium, dms lb. 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
USP, fib. dms lb. 5.00 - 5.20
Sulfacetamide-sodium, fib. dms lb. 5.00 - 5.20
USP, fib. dms lb. 5.20 - 5.40
Sulfadiazine, USP, microcrystals, dms lb. 10.60 -11.10
USP, powd., dms lb. 10.25 -10.75
Sulfadiazine-sodium, USP, dms lb. 11.25 -11.75
USP, microcrystals, dms lb. 11.60 -12.10
Sulfaguanidine, USP, dms lb. 2.50 - —
Sulfamerazine, USP, microcrystals, lb. 10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb. 11.25 -11.75
Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
Powd., dms lb. 8.50 - 9.00
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs. 16.00 - —
dms., l.c.l., l.t.l., works 100 lbs. 17.50 -18.50
Sulfanilamide, USP, 30-80 mesh., dms lb. 1.40 - 1.60
USP, microcrystals, dms lb. 1.70 - 1.90
powd., dms lb. 1.30 - 1.50
Sulfanilamide quinoxaline, veterinary, dms lb. 6.40 - 6.75
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
lb. .21 - —
dms., l.c.l., frt. alld lb. .23 - —
Sulfapyridine, NF, powd., bots., tins. lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, NF, microcrystals, dms lb. 2.85 - 3.00
USP, powd., dms lb. 2.50 - 2.65
Sulfathiazole-sodium, NF, dms lb. 2.75 - 2.90
Sulfur, coml., flour, bgs., mines. 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.40 - —
Coml., lump, bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.00 - —
Crude, bulk, f.o.b. cars, mines. long-ton. 26.50 - —
bulk, export, f.o.b. vessels Gulf ports long-ton. 28.00 - —
bulk, dom. and Canada, f.o.b. vessels Gulf ports. long-ton. 28.00 - —
bulk, imp., Mexican, dark or blended, f.o.b. vessel, Coatzacoalcos long-ton. 25.00 - —
Refd., flowers, NF, bgs., mines. 100 lbs. 4.75 - —
bbls., mines 100 lbs. 6.10 - —
Refd., flour, light, bgs., mines. 100 lbs. 4.35 - —
bbls., mines 100 lbs. 5.35 - —
lump, bgs., mines 100 lbs. 4.05 - —
rolls, bgs., mines 100 lbs. 4.60 - —
bbls., mines 100 lbs. 5.35 - —
salt block, bgs., mines 100 lbs. 4.25 - —
virgin block, bbls., mines 100 lbs. 4.30 - —
Rubbermakers, coml., reg., bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.90 - —
Sulfur, rubbermakers, 98-100% passing through 325 mesh, bgs., 100 lbs. 2.75 - —
bbls., mines. 100 lbs. 4.00 - —
Rubbermakers, refd., bgs., mines. 100 lbs. 4.00 - —
bbls., mines 100 lbs. 5.15 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.95 - —
bbls., mines. 100 lbs. 4.20 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .04½- —
ret. dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfur dioxide, liq., coml., cyls., works, frt. equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Refrigeration, 150-lb. cyls., dlvd. lb. .30 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .04½- —
55-gal. non-ret. dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
tanks, works ton. 18.60 - —
66° Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton. 22.35 - —
98%, tanks, works ton. 23.50 - —
99-100%, tanks, works ton. 23.95 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.45 - —
Sulfuric acid, CP, NF, consumers' cbys, c.l., frt. equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt. bots. extra, cs., c.l., works, frt. alld lb. .16¼- —
5-pt. bots. extra, cs., l.c.l., same basis lb. .18¼- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton. 25.00 - —
40%, tanks, works ton. 29.00 - —
65%, tanks, works ton. 39.50 - —
Sumac leaves, 28% tannin, bgs., ex dock ton. 135.00 Nom.
28% tannin, grd., bgs., ex dock ton. 130.00 Nom.
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
Triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton. .98 - —
Sweet birch oil, USP, northern, cns lb. 4.25 - 9.50
USP, southern, cns. lb. 2.30 - 2.75

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.25 - —
2,4,5-T Isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom., fibrous, New York, grd., bgs., c.l., works ton. 28.00 - —
bgs., l.c.l., works ton. 31.00 -36.00
Dom., fibrous, New York, 99.5%, 325 mesh, bgs., c.l., works. ton. 31.00 - —
bgs., l.c.l., works ton. 34.00 - —
99.95% micronized, bgs., works. ton. 38.00 - —



. . . a different job is done in each by

SOLVAY white AMMONIUM CHLORIDE

Will these properties help your process?

PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight: 53.50

Solubility in water: 20% at −13°C, 25% at 10°C, 30% at 33°C, 40% at 83°C. Strongly endothermic (lowers solution temperature upon dissolving). Aqueous solubility suppressed by sodium chloride. Slightly soluble in methyl and ethyl alcohol and acetone. Fair solubility in glycerine.

Melting Point: Sublimes.

pH of Solutions: 25°C: 1% 5.5, 3% 5.1, 10% 5.0 (technical grade).

Appearance: White crystals, practically 100% will pass through a No. 20 screen.

Reactions: Decomposed in solution by strong alkalies to liberate ammonia. Reacts with nitrites to form nitrogen. Reported to reduce oxides of cobalt and nickel at high temperatures. Hydroxides of nickel, zinc, cadmium and manganese reported to be more soluble in water in presence of ammonium chloride. Acid characteristics cause acceleration of set of urea-formaldehyde resins.

Quality: Principal impurity is sodium chloride. Very low in metallic impurities. Technical grade better than 99% NH_4Cl.

In batteries, it's a strong electrolyte. In bricks, it prevents "black-coring" by reacting with clay pyrites. In bread dough, it increases yeast action. SOLVAY Ammonium Chloride plays varied, vital parts in these, and many fields. In urea formaldehyde resins and adhesives, it speeds polymerization. On ski slopes, it slows melting. Other key uses are in textile and fur dyeing, compounding of "tanners bate" for leather, low-cost fireproofing of paper and textiles, flux for galvanizing and soldering, casting sealer for foundries.

SOLVAY

Aluminum Chloride • Chloroform
Vinyl Chloride • Calcium Chloride
Potassium Carbonate • Soda Ash
Sodium Nitrite • Snowflake® Crystals
Sodium Bicarbonate • Hydrogen Peroxide
Ammonium Chloride • Caustic Potash • Caustic Soda
Methylene Chloride • Monochlorobenzene • Chlorine
Ammonium Bicarbonate • Ortho-dichlorobenzene
Carbon Tetrachloride • Methyl Chloride • Cleaning Compounds • Para-dichlorobenzene

MAIL COUPON TODAY

Allied Chemical

SOLVAY PROCESS DIVISION
ALLIED CHEMICAL & DYE CORPORATION
61 Broadway, New York 6, N. Y.

Gentlemen: I am interested in the possible use of SOLVAY Ammonium Chloride in my operations. Please send me, without cost, samples and further information.

Name_____
Company_____
Position_____
Address_____
City_____ Zone_____ State_____ DU-4

Talc, dom., ord., Calif., grd., bgs., c.l., works ton.33.00 -39.50
ord., Vermont, off-color, grd., bgs., c.l., works ton.19.40 - —
bgs., l.c.l., works ton.37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton.20.00 -35.00

Tall oil, crude, dms., c.l., works lb. .04½- —
tanks, works lb. .02½- .03
Dist., dms., c.l., works lb. .07¾- —
dms., l.c.l., works lb. .08 - .08½
tanks, works lb. .05½- —
Refd., dms., c.l., works lb. .06¾- —
dms., l.c.l., works lb. .07 - .07½
tanks, works lb. .05½- .06
Tall oil acids, dms., c.l., works lb. .09¼- .10¼
tanks, works lb. .07½- .08½
Tall pitch, dms., c.l., works ton.50.00 -70.00
tanks, works ton.30.00 -40.00
Tallow, edible, tanks, dlvd lb. .11¾- —
Inedible, fancy, bleachable, tanks, dlvd lb. .07¾- .07⅞
fancy, bleachable, guaranteed, dms., f.a.s. lb. .09¼- —
No. 1, tanks, dlvd lb. .07 - —
prime, tanks, dlvd lb. .07½- .07⅝
special tanks, dlvd lb. .07¼- —
sulfonated, 25%, bbls., l.c.l lb. .08⅜- .08⅞
50%, bbls., l.c.l. lb. .09⅝- .10⅛
Tallow acids, dist., dms. lb. .15¼- .17¼
tanks lb. .13¼- —
Hydrogenated, dms. lb. 14¼- .16¼
Tallow oil, acidless, dms., c.l. lb. .14½- —
dms., l.c.l. lb. .15½- .17
Tangerine oil, Floridian, dms. lb. 2.00 - 2.80
Tankage, animal, feeding, 9-11% ammonia, bulk, unit-ton. 5.00 - —
Animal, feeding, 9-11% ammonia, Chicago, bulk unit-ton. 6.00 - —
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots lb. 2.05 - —
bbls., smaller lots lb. 2.06 - 2.10
NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb. 1.96 - 2.01
Tech., dms. lb. 1.05 - —
Tansy oil, dms. lb. 7.50 - 8.40
Tapioca flour, Brazilian, bgs., ex whse lb. .12½- .13½
Siamese, AAA, same basis lb. .08 - .09
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
dms., l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28%, dms., c.l., same basis. gal. .54 - .56
dms., l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms., c.l., same basis gal. .70 - .72½
dms., l.c.l., same basis gal. .73½- .74½
tanks, same basis gal. .62½- —
Tar, coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid, dom., USP, 230 or 250-lb. dms., c.l lb. .49 - —
230 or 250-lb. dms., 10,000-lb. lots, 1 shipt lb. .49½- —
230 or 250 lb. dms., smaller lots lb. .50 - —
100-lb. dms. lb. .51 - —
Imp., bgs. lb. .42 - .45
Terpine glycol ether, dms., c.l., works lb. .23¼- —
dms., l.c.l., works lb. .25½- —
tanks, works lb. .22 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, dms., l.c.l., dlvd. E lb. .23¾- —
Extra, dms. lb. .41 - .60
Prime, dms. lb. .30 - .45
Terpinyl acetate, extra, cns., dms. lb. .60 - .75
Prime, dms. lb. .55 - .70
Terpinyl propionate, dms. lb. 1.75 - 3.00
Terra alba (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gram. .70 - —
Testosterone, USP 100-gram lots, gram lots, bots gram. .68 - —
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., works lb. .20½- .21⅛
smaller dms., works lb. .23½- .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½- —
dms., l.c.l., dlvd. E lb. .62½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
dms., l.c.l., dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .37 - —
dms., l.c.l., l.t.l., Memphis, Tenn. lb. .38 - —
dms., l.c.l., l.t.l., Newark N. J. lb. .40 - —
tanks, dlvd., E. of Denver lb. .365 - —
tanks, dlvd. W. of Denver lb. .375 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, dlvd. lb.12.50 -15.00
Thallium sulfate, 99%, bots, dlvd lb. 8.00 -13.00
Theobromine, NF, fib. dms lb. 4.50 - —
Theobromine and sodium acetate, USP, fib. dms lb. 4.75 - —
Theobromine sodio-salicylate, NF, fib. dms lb. 3.90 - —
Theophylline, anhyd., or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, reg., fib. dms kilo.60.00 - —
USP, ampule grade, fib. dms kilo.62.00 - —
Thiamine mononitrate, USP, fib. dms kilo.62.00 - —
Thiocarbanilide, dms., ton lots lb. .72 - —
dms., less ton lots lb. .74 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.10 - —
Tungstated, PTMA, kgs., works. lb. 6.40 - —
Thioglycolic acid, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., frt. alld. lb. .33 - —
bgs., l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine, bots., 1-kilo. lots kilo.450.00 -500.00
Thyme oil, NF, red., cns., dms. lb. 1.45 - 1.75
white, cns. lb. 1.70 - 2.00
Tech., white, cns lb. .40 - 1.85
Thymol, fib. dms lb. 2.60 - 3.00
Thymol iodide, NF, dms. lb. 7.36 - —
Timbo root, (see Cube root).

Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. 1.00 - —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, chalk-resistant, bgs., c.l., dlvd. lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
Anatase, ceramic, bgs., c.l., dlvd. lb. .23½- —
bgs., l.c.l., dlvd lb. .24½- —
reg., bgs., c.l., dlvd lb. .23½- —
bgs., l.c.l., dlvd. lb. .24½- —
Metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla. ton.120.00 - —
bgs., c.l., Niagara Falls, N. Y ton.137.50 - —
bgs., 5 ton lots, same basis. ton.142.50 - —
bgs., ton lots, same basis. ton.147.50 - —
Rutile, non-chalking, bgs., c.l., dlvd. E lb. .27½- —
bgs., l.c.l., dlvd. E lb. .28½- —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium hydride, powd., dms., works lb. 8.10 - 9.00
Titanium pigment, calcium-rutile base, reg., bgs., c.l., dlvd. lb. .09¼- —
bgs., l.c.l., works lb. .09¾- —
Calcium-rutile base, high-tinting, dms., c.l lb. .09 - —
dms., l.c.l lb. .09½- —
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, bbls., frt. alld lb. .81 - —
d-a-Tocopherols, mixed, NF, conc., pure basis kilo.91.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis kilo.166.00 - —
d-a-Tocopheryl acid, succcinate, cryst. kilo.148.00 - —
dl-a-Tocopherol, bots kilo.134.20 - —
dl-a-Tocopheryl acetate, bots kilo.122.00 - —
25% dry, powd., bots kilo.30.50 -32.00
o-Tolidine base, dry, kgs., 100% basis lb. 1.40 - —
Paste, kgs., 100% basis lb. 1.35 - —

Toluol

Toluol quotations, both coaltar and petroleum, may now be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.35 - —
Tolu balsam, cns lb. 4.25 - 5.00
Toluene, coaltar, indust. or nitration tanks, works:—
Bethlehem, Pa gal. .32 - —
Birmingham, dist gal. .32 - —
Chicago, dist gal. .32 - —
Cleveland, dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N. Y gal. .32 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal. .32 - —
Middletown, Ohio gal. .33½- —
Minnequa, Colo gal. .32 - —
Philadelphia dist gal. .32 - —
Pittsburgh dist gal. .32 - —
Sparrow's Point, Md gal. .32 - —
Terre Haute, Ind gal. .34 - —
Youngstown, Ohio gal. .32 - —
Petroleum, indust., 2°, tanks, works:—
Albany, N. Y gal. .35 - —
Bayonne, N. J gal. .34 - .35½
Baytown, Tex gal. .33 - .35½
Chicago, Ill gal. .35 - .35½
Detroit, Mich gal. .35 - —
Houston, Tex gal. .33 - —
Philadelphia, Pa gal. .34 - —
Providence, R. I gal. .35 - .35½
Wood River, Ill gal. .34 - —
p-Toluenesulfonamide, powd., dms., works lb. .70 - —
p-Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms., l.c.l., works lb. .18 - —
p-Toluenesulfonic acid, monohydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .23 - —
dms., l.c.l., same basis lb. .24 - —
tanks, same basis lb. .22 - —
p-Toluidine, flake, dms., frt. alld lb. .64 - —
Solid, dms., frt. alld lb. .60 - .61
o-Toluidine-m-sulfonic acid, frt. alld. lb. .70 - —
p-Toluidine-m-sulfonic acid, bbls., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs., works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., c.l., frt. alld lb. .97 - —
fib. dms., l.c.l., frt. alld lb. 1.00 - —
Powd., fib. dms., same basis lb. 1.00 - —
Tonka beans, Angostura, cks lb. No prices.
Brazilian, Surinam, cs lb. 1.35 - —
Totaquine 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., t.l., works lb. .22 - —
dms., l.c.l., l.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs. lb. 4.50 - 4.70
No. 2, cs. lb. 3.50 - 3.75
No. 3, cs. lb. 3.25 - 3.40
USP, powd., bbls. lb. 1.25 - 1.38
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .42½- —
non-ret. dms., l.c.l., frt. alld E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver lb. .40 - —
Tributyl phosphate, dms., c.l., works lb. .52½- —
dms., l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine, dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .68½- —
tanks, same basis lb. .65 - —
Trichloroacetic acid, bots lb. 2.00 - 2.50
Trichlorobenzene, dms., c.l., frt. alld. E lb. .14½- —
dms., l.c.l., frt. alld. E lb. .15½- —
tanks, frt. alld. E lb. .13 - —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., works lb. .14¾- —
dms., l.c.l., works lb. .17¾- —
tanks, works lb. .13¾- .14¼
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 - —
dms, l.c.l., dlvd. E lb. .15¼- —
tanks, works, frt. equald lb. .12 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate 65% soln. ret. cbys. works. frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., l.c.l., dlvd. lb. .36 - —
tanks, dlvd. lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .34½- —
dms., l.c.l., dlvd. lb. .35½- —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., dlvd. lb. .26½- —
dms., l.c.l., dlvd. lb. .27½- —
tanks, dlvd. lb. .24 - —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½- —
dms., l.c.l., same basis lb. .25½- —
tanks, same basis lb. .22 - —
Triethylamine, dms., c.l., works, dlvd. E lb. .49 - —
tanks same basis. lb. .46½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .45¾- —
non ret. dms., l.c.l. frt. alld. E. of Denver lb. .46¾- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., l.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E. lb. .22 - —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., l.c.l., dlvd. E. lb. .52½- —
tanks, dlvd. E. lb. .49 - —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., l.c.l., dlvd. E. lb. .24¼- —
tanks, dlvd. E. lb. .20¾- —
Trimethylamine, 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .35 - —
dms., l.c.l., works, frt. equald, 100% basis lb. .35½- —
tanks, works, frt. equald, 100% basis lb. .26 - —
Trioxane, pure, dms., c.l., t.l., works. lb. .50 - —
dms., l.c.l., works lb. .51½- —
Tripentaerythritol, bgs., l.c.l., works. lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .40 - —
bbls., l.c.l., frt. equald lb. .41 - —
Triphenylguanidine, bbls., works lb. .90 - —
tanks, same basis lb. .18½- —
Tripropylene glycol, dms., c.l., frt. alld. E lb. .20½- —
dms., l.c.l., frt. alld. E lb. .21½- —
Tripropylene glycol prices 1c. per lb. higher in West.
Tripropylene phosphate (see Sodium phosphate tribasic).
Tyrothricin, USP, bots grams. .55 - .58
dl-Tryptophane, fib. ctns., works. kilo.75.00 - —
Tung oil, dms., c.l., New York lb. .23¾- —
dms., l.c.l., same basis lb. .24¼- .24½
tanks, New York lb. .22¼- —
tanks, dom. mills lb. .22 Nom.
Tungsten metal powd., 2-5 microns, dms., works lb. 4.00 - —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
dms., smaller lots, works lb. 3.15 - 3.50
Tuscan red, bbls., frt. equald lb. .28 - .32
Turkey red, bbls., works lb. .62 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns., dms lb. .28 - .45

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd, N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. .35 - .39½
Jobbing types, bbls., same basis. lb. .19 - —
Regular types, dry bbls., same basis lb. .22½- .35
Ultramarine blue dlvd. prices ½c. higher Ala., Fla., Ga., La., (Shreveport 1¼c), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equald. with Chicago.
Umber pigment, burnt, American, bgs., c.l., works lb. .07 - .07¾
bgs., l.c.l., works lb. .07¼- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y lb. .07¾- —
Raw, American, bgs., works lb. .07½- .08¼
Turkey-type, bgs., works lb. .06¾- .07
Undecylenic acid, dms. lb. 1.45 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton.125.00 - —
bgs., l.c.l., dlvd. E., ex whse. ton.145.00 - —
45% N, agricultural, bgs., c.l., (30 tons), dlvd. E ton.110.00 - —
Urea-ammonia liquor, A and B grades, N basis, tanks, Belle, W. Va ton.126.00 - —
C grade, tanks, same basis ton.124.50 - —
37 grade, tanks, same basis ton.153.00 - —
Urethane, USP, dms. lb. 1.45 - —
Uva-ursi leaves, bls. lb. .12 - .14

V

Valerian root, Belgian, bgs. lb. .33 - —
Indian, bgs. lb. .27 - —
dl-Valine, dms., works lb.21.00 -27.50
Valonia beards, 40-42% tannin, bgs., ex dock ton.90.00 Nom.
Valonia cups, 28-30% tannin, bgs., ex dock ton.83.00 Nom.
Valonia extract, powd., 63% tannin, bgs., ex dock, duty extra. lb. .10½ Nom.
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb. 8.75 - 9.00
Mexican, cuts, tins lb. 7.50 - 7.75
whole, tins lb. 8.25 - 8.50
Tahiti, cs. lb. 7.00 - —
Vanillin, ex eugenol, tins, 25-lb. lots lb. 6.50 - 6.75
tins, smaller lots lb. 6.90 - 7.25
Ex lignin, 100-lb. fib. dms., 1,000-lb. lots or more lb. 2.85 - —
100-lb. fib. dms., smaller lots. lb. 2.95 - 3.10
Venetian red, jobbing, bgs., works. lb. .0475- —
20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 - —
35%, bgs., works lb. .0625- —
40%, bgs., works lb. .0675- —
Vetiver oil, Bourbon, cns. lb.11.75 -11.90
Haitian, cs. lb. 9.25 -10.00
Java, cns. lb.18.50 -20.00
Victoria blue toner, moylbdated, PMA, 250-lb. bbls., dlvd. N. of Tenn. and N. C., E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb. 4.50 - —
Tungstated, PTMA, bbls. lb. 5.55 - —
Victoria blue toner, dld., prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; Pacific coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Vinyl acetate monomer, 55-gal. dms., c.l., works lb. .19 - —
55-gal. dms., l.c.l., works lb. .20 - —
tanks, works lb. .16½- —
tanktrucks less than 4,000 gal., works lb. .17½- —
Vinyl n-butyl ether, tech., dms., l.c.l., works lb. .35 - —
Vinyl chloride monomer, tanks, works lb. .11 - .12
Vinyl ether, tech., dms., c.l., works. lb. .26 - —
dms., l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
USP, anesthesia, bots., 50cc. hospitals bot. 1.12 - —
USP, anesthesia, bots., 75cc. hospitals bot. 1.56 - —
Vinyl ethyl ether, tech., dms., works lb. .30 - —
Vinyl isobutyl ether, tech., dms., l.c.l., works lb. .35 - —
Vinyl methyl ether, cyls., works lb. .30 - —

Cylinders are sold outright, or if shipped against deposit, a free period of sixty days is allowed; and if empties are returned prepaid and in good condition within that period full refund is made.

Vinyl propionate, monomer dms., c.l., dlvd. lb. .49 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.36 - —
1 to 9 dms. works lb. 1.50 - —
tanks, works lb. 1.33 - —
Vinyltoluene, dms., c.l., frt. alld. lb. .18½- —
dms., l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
Virginia type red, bbls., works lb. 1.40 - —
Viosteral in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units. .02½- —
Vitamin A acetate, syn., cryst., beads, 500,000 A units per gram gram. .07¼- —
Syn., dry, 500,000 units per gram, kilo lots kilo.67.50 - —
dry, 325,000 units per gram, same basis kilo.43.88 - —
dry, 250,000 units per gram, same basis kilo.33.75- —
Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies.
Vitamin A, liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin A, palmitate, liq. 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 - —
Liq. in oil, 1,000,000 A units per gram 1,000,000 units. .10 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., 1-gram or 5-gram vials gram.245.00 - —
Oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 - —
Vitamin C (see Ascorbic acid).
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).
Vitamin D_2, dry, 850,000 units per gram, kilo lots kilo.42.50 - —
850,000 units per gram, less than kilo lots kilo.45.00 - —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin G (see Riboflavin).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25 gram bots gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P, petroleum).

W

Wahoo root, bark, bls. lb. 2.25 - —
bls., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
bls., 5-24-lb. lots, cns., New York or Chicago lb. 2.15 - —
Watchung-type reds, bbls lb. 1.95 - —
Wattle bark, fair average, African, bls., ex dock ton.80.00 - —
Merchantable, bls., ex dock ton.75.00 - —
Wattle extract, liq., 35% tannin, bbls. lb. .08¼- .08⅛
Solid, East Africa, 60% tannin, bgs., ex dock, duty extra lb. .08275- —
Solid, South Africa, 60% tannin, bgs., ex dock, duty extra lb. .0840- —
Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb. lots, New York or Chicago lb. 2.05 - —
cns., 5-24-lb. lots, New York or Chicago lb. 2.15 - —

Waxes

Wax quotations, formerly grouped under one heading, are now listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms....gal.11.25 • —
Wheat starch (see Starch, wheat).
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls....lb. .18 • .19
White precipitate, USP, powd., dms., lb. 6.55 • —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls..lb. .20 • —
Thin, rossed, bls. .....lb. .21 • —
Wintergreen oil, USP, nat., northern, cns....lb. 6.35 -10.30
USP, nat., southern, cns.....lb. 4.50 - 7.50
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls.....lb. .16 • .17
Witch hazel leaves, bls.....lb. .27 • —
Wollastonite, fine, bgs., c.l., works. ton.39.50 • —
bgs., l.c.l., ex whse.....ton.56.00 • —
Medium, bgs., c.l., works.....ton.27.00 • —
bgs., l.c.l., ex whse .....ton.44.00 • —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat, crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed oil (see Chenopodium oil, NF).
Wormseed oil, Levant, bgs.....lb. 4.25 - 4.50
Wormwood oil, cns. .....lb. 5.50 • —

X

Xylene, coaltar, indust., tanks, works—
Bethlehem, Pa. .....gal. .34 • —
Birmingham dist. .....gal. .32 • —
Chicago dist. .....gal. .35 • —
Cleveland dist. .....gal. .34½- —
Geneva, Utah .....gal. .29 • —
Johnstown, Pa. .....gal. .33 • —
Lackawanna, N. Y.....gal. .35 • —
Lone Star, Tex. .....gal. .33 • —
Lorain, Ohio .....gal. .33 • —
Middletown, Ohio .....gal. .34 • —
Minnequa, Colo. .....gal. .34 • —
Philadelphia dist. .....gal. .34 • —
Pittsburgh dist. .....gal. .32 • —
Sparrows Point, Md....gal. .34 • —
Terre Haute, Ind.....gal. .34 • —
Youngstown, Ohio .....gal. .32½- —
Petroleum, indust., tanks, works:—
Bayonne, N. J. .....gal. .34 • .35½
Baytown, Tex. .....gal. .33 • .35½
Chicago, Ill. .....gal. .35 • .35½
Houston, Tex. .....gal. .33 • —
Philadelphia, Pa. .....gal. .34 • —
Providence, R. I. .....gal. .35 • .35½
Wood River, Ill. .....gal. .35 • —
Xylenol cryst., 58°-60°C., m.p., dms., l.c.l., works lb. .40 • —
Cryst., 56°-58°C., m.p., dms., l.c.l., works, frt. equald lb. .30 • —
45-47°C., m.p., dms., c.l., same basis..lb. .212 • —
dms., l.c.l., same basis...lb. .215 • —
tanks, same basis .....lb. .199 • —
Xylenol fraction, b.r. 7°-9°C., dry above 227°C., dms., c.l., same basis..gal. .96 • —
dms., l.c.l., same basis..gal. .99 • —
tanks, same basis .....gal. .83 • —
b.r. 7°-9°C., dry at or below 227°C., dms., c.l., same basis..gal. 1.11 • —
dms., l.c.l., same basis..gal. 1.14 • —
tanks, same basis .....gal. 1.00 • —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works..lb. .39 • —
dms., l.c.l., sam basis .....lb. .40 • —
tanks, same basis .....lb. .38 • —

Xylol

Xylol quotations, both coaltar and petroleum, may now be found under Xylene.

Y

Yara, yara, cns. .....lb. 2.15 - 2.65
Yeast, brewers, debittered, USP, Saccharomyces, dlvd..lb. .27 • —
Dry, USP, 50 Int'l B units per gram, 100-lb. dms lb. .47 • —
90 Int'l B units per gram, 100-lb. dms lb. .52 • —
200 Int'l B units per gram, 100-lb. dms lb. .56 • —
300 Int'l B units per gram, 100-lb. dms..lb. .60 • —
Torula, USP, dlvd. .....lb. .18 • —

Yellow Pigments

Yellow pigment quotations, formerly grouped under one heading, are now listed individually, For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls. .....lb. .40 • .42
Ylang-ylang oil, Bourbon, bots..lb.14.00 -16.00
Bourbon, extra, bots .....lb.28.00 -40.00
Madagascar, bots .....lb. No Stocks.
Yohimbine hydrochloride, bots, tins. oz. 3.75 - 4.25

Z

Zein, bgs., 36,000-lb. lots or more. lb. .38 • —
bgs., 1,000 to 36,000-lb. lots, works. lb. .40 • —
bgs., smaller lots, works .... lb. .43 • —
Zinc acetate, NF, VIII, dms. ....lb. .53 • —
Tech., dms., works .....lb. .29½- .29¾
Zinc borate, bgs., c.l., dlvd. E lb. .192 • —
bgs., l.c.l., dlvd. E .....lb. .202 • —
Zinc chloride, NF, gran., dms lb. .42 • —
Precip., powd., dms. .... lb. .26 • —
Soln., 50%, dms., c.l., works. 100 lbs. 5.80 • —
dms., l.c.l., works....100 lbs. 6.40 • —
tanks, works .....100 lbs. 5.15 • —
Tech., fused, dms., c.l., works. 100 lbs.10.70 • —
dms., l.c.l., works...100 lbs.11.20 • —
gran., fib. dms., c.l., works. 100 lbs.11.45 • —
fib. dms., l.c.l., works..100 lbs.11.95 —
Zinc chromate, bbls., dlvd. .....lb. .29 • —
Basic, bbls., dlvd. .....lb. .34 • —
Zinc cyanide, dms., 1,000-lb. lots or more, works..lb. .55 • —
dms., smaller lots, works.....lb. .57 • —
Zinc dust, pigment, bbls., c.l., works..lb. .17½- —
bbls., l.c.l., works.....lb. .18½- —
Zinc fluoride, bbls., works .....lb. .49 • .50
Zinc hydrosulfite, dms., c.l., frt. alld..lb. .22 • —
dms., l.c.l., frt. alld.....lb. .24 • —
Zinc metal, prime western slabs, E. St. Louis..lb. .13½- —
Prime western, slabs, New York. lb. .14 • —
Zinc naphthenate, liq., 8% Zn., dms., frt. alld..lb. .24½- —
10% Zn, dms., frt. alld. .....lb. .30 • —
Zinc nitrate, tech., cryst., bbls., works..lb. .20 • —
Zinc oxide pigment, pigment, American process, lead-free, bgs., c.l., frt. alld..lb. .14½- —
bgs., l.c.l., same basis.....lb. .15½- —
leaded, 35%, bgs., c.l., mills, frt. alld..lb. .15½- —
bgs., l.c.l., same basis....lb. .16½- —
80%, bgs., c.l., same basis..lb. .15⅞- —
bgs., l.c.l., same basis....lb. .16⅞- —
French process, coml., green seal, bgs., c.l., frt. alld..lb. .15¾- —
bgs., l.c.l., same basis....lb. .16¾- —
red seal, bgs., c.l., same basis. lb. .15¼- —
bgs., l.c.l., same basis....lb. .16¼- —
white seal, bgs., c.l., same basis..lb. .16¼- —
bgs., l.c.l., same basis...lb. .17¼- —
USP, ctns., c.l., frt. alld.....lb. .17¼- —
ctns., l.c.l., same basis.....lb. .16¼- —
Zinc oxide Pac. Coast prices 1c. higher.
Zinc phenolsulfonate, NF, gran., dms..lb. .43 • .44
NF, powd., dms. .....lb. .46 • .53
Zinc resinate, precip. 7.2-7.6% Zn, dms., frt. alld..lb. .29 • —
Zinc silicofluoride, dms., works..lb. .12½- .14
Zinc stearate, tech., USP, ctns., c.l., lb. .41 • —
ctns., l.c.l. .....lb. .42 • .46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd. E..100 lbs. 8.75 • —
bgs., l.c.l., dlvd. E..100 lbs. 9.75 • —
USP, gran., dms.....lb. .26 • —
Zinc sulfate in bbls. 40c. higher.
Zinc sulfide, pure, bgs., c.l. dlvd..lb. .2530- —
Zinc undecylenate, dms. .....lb. 2.00 • —
Zinc yellow (see Zinc chromate).
Zinc-ammonium chloride, bgs., c.l., works. 100 lbs.10.25 • —
bbls., c.l., works .....100 lbs.10.85 • —
bbls., l.c.l., works .....100 lbs.11.35 • —
Zinc-formaldehyde sulfoxylate, basic, dms., c.l...lb. .25½- —
dms., l.c.l. .....lb. .26 • —
Zircon (G), gran., bgs., c.l., works. lb. .03½- —
bgs., 5 tons to c.l., works....lb. .03⅝- —
bgs., 1 ton to 9,999-lb. lots, works..lb. .04 • —
bgs., smaller lots, works....lb. .06½- —
Zircon (G), milled, bgs., c.l., works. lb. .04⅛- —
bgs., 5 tons to c.l., works....lb. .04⅜- —
bgs., 1 ton to 9,999-lb. lots, works..lb. .04⅝- —
bgs., 500-1,999-lb. lots, works..lb. .07½- —
Zircon (G) in barrels 1c. higher.
Zirconium acetate, 13% soln., ZrO_2, c.l., 30,000 lbs. minimum, works lb. .23 • —
Zirconium hydride, powd., dms., works lb. 7.25 - 9.00
Zirconium oxide, CP, white, grd., bbls. or bgs., works..lb. 1.50 • —
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works..lb. .45½- —
bgs., smaller lots, works..lb. .48 • —
Electric-fused, milled, bgs., c.l., works..lb. .59 • —
bgs., 5-ton lots, works....lb. .59½- —
bgs., 1-ton to 9,999-lb. lots, works..lb. .60 • —
bgs., 500 to 1,999-lb. lots., works..lb. .60½- —
bgs., smaller lots, works..lb. .63 • —
Glass polishing grade, 94-97% ZrO_2, bgs., works .....lb. .53 • .65
Opacifier grade, 85-90% ZrO_2, bgs., lb. .27 • .59
Stabilized oxide, 91% ZrO_2, milled, bgs lb. .62 • .85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works.....lb. .35½- —

Her nose knows her preference in paints – and she follows her nose to the store that sells paints made with odorless solvents. You can produce superior odorless paints with Sinclair's team of top-quality Odorless Solvents. Light and Heavy Odorless Solvents are available in full and split tank car quantities. For your protection against contamination, Sinclair maintains a fleet of special tank cars, used exclusively in Odorless Solvent service. Prompt shipments to meet your production requirements are assured.

Sinclair Odorless Solvent Light – Distillation Range 345-400°F
Sinclair Odorless Solvent Heavy – Distillation Range 375-465°F

For samples, prices, and complete information on Sinclair Odorless Solvents, write or call . . .

SINCLAIR CHEMICALS, INC.
(Affiliate of Sinclair Refining Company)
600 Fifth Avenue, New York 20, N. Y. – Phone Circle 6-3600
155 North Wacker Drive, Chicago 6, Illinois – Phone Financial 6-5900

Oil, Paint and Drug Reporter

Founded October 18, 1871, by William O. Allison
Directed 1900-1942 by Harry J. Schnell
Incorporating Drug Paint and Oil Trade, The New York Drug Bulletin, The Weekly Drug News, New York Druggists' Price Current, The Soap Makers Journal, Oil and Paint Review, and International Petroleum Reporter.
Member of Audit Bureau of Circulations

Copyright 1957 by

SCHNELL PUBLISHING COMPANY, INC.
WILLIAM S. AUCHINCLOSS *President*
30 Church Street, New York 7, N. Y., U. S. A.
Telephone REctor 2-9820 Cable Address: Reporter New York

Volume 171 **April 22, 1957** **No. 16**

Latin-American Opportunities

Among the great number of things that were to be learned by the people of the United States out of the recent meeting of the Organization of American States are three which should be given all possible attention, politically, commercially, and socially. The first is that Latin America is the most promising, fastest growing section of the world, in a full economic sense. It has enormous natural resources, both actual and potential, including a supplemental temperate zone which can provide this country with another full growing season for the fruits and other vegetable foods for which there is here a year-round desire and demand.

Secondly, Latin America needs assistance in its economic development; it offers real opportunities for financial and technical investment; it does not want handouts, but does want and welcomes the outstretched hand of friendship—from the United States.

The third thing to be learned with a purpose is that in Latin America there is as strong an opposition to communistic interloping and aggression as there is in the English-speaking countries of the western hemisphere.

In giving those matters the consideration which they deserve, it must be recognized, as an executive of an enterprise with long, close Latin-American relations told the senate special committee on the foreign aid program, that "you cannot buy friendship." "We could give our shirts to Latin America," he said, "and not succeed in making a single friend or accomplishing any lasting good for our country if our actions were not prompted by sentiments of sincerity and true understanding. These people appreciate friendship and respect, and our program will not succeed unless it is founded on these qualities."

Some governmental participation is needed in the development of proper, desirable commercial and social economic relations with Latin America. This is particularly true with reference to monetary matters, especially currency convertibility and taxation practices. But, the biggest need must be evaluated in terms of personality. And it must be admitted that there is with respect to Latin-American relations a need for a service such as is recently being provided with reference to areas and peoples of Eurasia and North Africa, designed to promote human relations by means of sociologic research toward a general understanding of peoples, their ways of life, their problems, values, and ideas.

There are opportunities for broadly profitable human relations in every Latin-American country—if they be approached with adequate understanding of and respect for the people of those countries. Chile needs friendly helping because of the slump in copper prices. In Brazil, there is a hardware manufacturer who has asked the Bureau of Foreign Commerce for help in getting US know-how to go along with its own capital in a program of expansion. In Mexico, a producer and distributor of paints and related products is looking for about $175,000 in private capital to finance plant expansion. There are many such openings, most of them real opportunities for technical or financial investment, in almost every part of Latin America. They are an undeveloped part of what has already made Latin America the biggest supplier of materials to the United States and the location of at least 30 percent of the investment of US private capital in foreign countries.

Latin America is one section of the world where it will pay the United States and its people to go all out in providing economic aid for potential, desired, and contemplated developments.

Expanding the Fertilizer Market

As a preliminary step toward further expansion of the fertilizer market, the National Plant Food Institute recently announced its intention to conduct a national survey "to determine factors which influence the farmer to buy fertilizers." The announcement came a short time before the publicizing of a government report that it would be possible to cut a quarter-billion dollars from the Department of Agriculture's share in the pending federal budget because sign-ups under the soil bank program had not come up to the estimates on which the budget requests had been based. It would, of course, require super-high mathematics to figure out what that would, or even might, mean in terms of fertilizer buying.

But, the NPFI announcement was preceded a short time by the issuance of a statement by the agriculture department that its investment in farm surpluses under price-support programs had declined more than a half-billion dollars over the twelve months ended January 31. There is, however, no reason to conclude that that condition was regarded by the industry's organization as contributive to bigger buying of fertilizers. There was some such suggestion in the official news that came out at about the same time to the effect that the farmers of this country had a half-billion more in spending money at the end of 1956 than they had a year earlier. But, when reduced to the basis of overall buying power, that gain was cut in half, and it makes little difference that prices of fertilizers have not been increased as much as the average: neither have prices of farm products. The 1956 per capita income of the farm population was 1 percent higher than that in 1955; although there was an increase of 1 percent in the population. There must have been an increase in the volume of sales or a shift to higher-priced products.

There are figures on which one can spend any amount of time trying to calculate what they could mean in fertilizer buying. But, the answer would not mean anything. There are various more important factors. In New Jersey (a high-earning agricultural state), demands for Farmers Home Administration loans increased more than 40 percent in number since July 1, 1956. In that case, however, it is significant that while the demands in the preceding year were mainly from vegetable growers, in the later year they came mostly from poultrymen, who are not in the same class as prospective buyers of fertilizers.

Surveys have been made in any number of marketing areas to get some sort of a lead on why the public buys this or that. No two of them even come close to being similarly convincingly informative. In the manner common to all sorts of pollings, the results vary according to the process employed and, more so, to the manner of its application. It is axiomatic in all frank philosophizing on surveys that any adequately experienced pollster can get any results that he desires in any connection, at any time or any place. The tendency of those questioned is almost invariably to give a made-to-order answer.

There is one way in which the fertilizer industry can expand its market. That is by helping the farmer, by education, not subsidization, to expand the market for his products, in volume and in value. It can be done—with those farmers who are not interested only in the "fertilizing" of their incomes by government, but are at least willing to do as much themselves for their fields.

Washington Talks It Over

GSA Guide to Record Retention Requirements Is Put Out As Aid to Companies Subject to Government Audit.

By Ralph L. Cherry
Chief, OPD Washington Bureau

Companies with problems as to what records they should retain for possible government audit or examination should get hold of a new booklet just put out by General Services Administration. It is titled a "Guide to Record Retention Requirements." For those subscribers of the *Federal Register* it is available as Part II of the issue for April 11.

The matter of records retention becomes a real problem in the current age of red tape, carbons and microfilming, and the guide should be of real help to those who want to start "cleaning house" but aren't certain where to begin.

The fifty-six page document contains 887 entries detailing the responsibility and retention period for the many types of records that can be required by 10 executive departments and sixteen independent agencies of government.

Each entry includes a brief description of the type of records to be kept by an activity affected by government regulation, who must keep them and, in most instances, how long they must be retained. Periods of retention vary from six months to sixty years with three years appearing as the most common requirement. No retention period is indicated for about one-third of the items listed.

Although most of the entries relate to actual regulations some few are of an advisory nature only. The guide itself carries no regulatory force but is designed as a public service. The guide's index, wide in scope with about 1,500 items, lists for ready reference the categories of persons, companies, or products to which the record retention requirements apply.

Polio Law Extension Sought

A movement has been launched in the house to extend the polio vaccination law for another year, against the viewpoint of the administration that the law has served its purpose and should be allowed to expire. Rep. Robert E. Jones of Alabama is leading the drive. He is a member of the house subcommittee that recently investigated the program.

Mr. Jones' point is that the funds available for free vaccination of the under-twenty group and expectant mothers has been sufficient to provide protection to only about 38 percent of the eligible class. In the two years the program has been in operation congress authorized appropriations of $53.6 million, all but $9 million of which had been spent by last March 15.

Almost one-third of the 66 million persons eligible for the free vaccine have received no Salk shots and only about 11 million have received the full three-shot series. In addition to extending the program for another year, Mr. Jones is proposing that some of the funds be set aside for promotional purposes to get more persons interested in taking the shots.

Quicker Pay for Contractors

The government has just taken steps that will make it possible for contractors to get paid for work done quicker than they have in the past. The government is bringing its procedures for paying contractors in line with regular commercial billing practices.

The action is to discontinue a fifty-year old requirement for including and signing a special certification on invoices submitted to the government. Accordingly, contractors need no longer state on government invoices that the bill is correct and unpaid, nor need they designate an authorized person to sign such statements on their behalf.

This requirement was largely cautionary and legal in character because government certifying officers authorize payment only after a determination that satisfactory supplies have been received or work performed.

The elimination removes an obstacle which has delayed payment in numerous cases and modifies a burden for government agencies and suppliers, particularly small business firms.

Plastics in the Foundries

Small Business Administration sees great opportunities for small foundries and machine shops to enter the plastic tool and die field. Use of plastics for this purpose has been growing rapidly in recent years.

Nearly 14 million pounds of plastics were consumed in tooling in 1956 as against 5 million pounds in 1954—an increase of 180 percent in two years. Almost 60 percent of the 1956 use consisted of the epoxy plastic; phenolics constituted about 30 percent; and other plastics, principally polyesters and ethyl cellulose, made up the remainder.

Studies made by SBA indicate that from the standpoint of capital investment required to manufacture plastic tools and dies, outlays would be relatively low for existing machine and foundry shops, although the amount of investment depends on the scope of the operations planned.

FTC Curbs Brush Makers

Manufacturers of paint brushes who have been labeling their product as containing "pure bristle" when the brushes are not made wholly of hog or swine bristles are under notice from the Federal Trade Commission to modify their claims. The term "pure bristle" is being reserved by the commission for hog or swine bristles.

The commission has no objection to mixing the hog bristles with horse hair as many manufacturers do, but when this "adulteration" takes place the public must be let in on this fact.

The commission doesn't believe it necessary to go as far as one of its examiners proposed of showing the mixture by percent, but the manufacturers must show what fibers are contained in a brush, in the order of their predominance.

Book Shelf

CLAYS AND CLAY MINERALS—Edited by Ada Swineford. Cloth; 444 pages, 6 x 9 inches. Washington, D. C.; National Academy of Sciences, Publication Number 456, National Research Council.

This volume consists of the proceedings, technical reports, and statistical data of the fourth national conference on clays and clay minerals held at Pennsylvania State University, University Park, Pennsylvania, October 10 through 13, 1955.

SOLVENTS, 7th Edition—By Thomas H. Durrans. Cloth; 244 pages, 8½x5½ inches. New York: D. Van Nostrand Company. $8.

This book has been revised and published repeatedly since its first appearance in 1930. The seventh edition, just off the press, of this British authored work on solvents discusses the broad spectrum of solvents.

It gives their physical and chemical properties, solvent balance characteristics, and pays particular attention to solvents and plasticizers for the new plastics. The theory and practice of solvent formulation and use are presented in considerable detail.

You can get more dry **vitamin E** in less space with DPi *d*-α-Tocopheryl Acid Succinate

This is a pure crystalline form of vitamin E with 1210 International Units of Vitamin E per gram.*

It not only solves the problem of incorporating vitamin E in a tablet or dry capsule, it lets you do so with a minimum of bulk. It can add vitamin E potency to other ingredients that are incompatible with liquid forms of vitamin E.

The succinate is a white powder that is nearly odorless and tasteless. It melts at approximately 76 C, and is very stable to atmospheric oxidation.

We will be happy to supply you with a data sheet giving complete details on *d*-α-Tocopheryl Acid Succinate, provide help on any problems involving incorporation in your products, and meet your production requirements with immediate shipment from stock. ***Distillation Products Industries,*** Rochester 4, N. Y. Sales offices: New York, Chicago, and Memphis • Gillies, Inc., Los Angeles, Portland, and San Francisco • Charles Albert Smith Limited, Montreal and Toronto.

* If this seems high, it's because the biological potency of one milligram of this form has been found to be 1.21 I.U. of Vitamin E.

The price per I.U. is no higher than for liquid vitamin E. You pay no premium for pure crystalline compound.

leaders in research and production of vitamins A and E

DPi

Also . . . distilled monoglycerides . . . ; some 3500 Eastman Organic Chemicals for science and industry

Distillation Products Industries *is a division of* **Eastman Kodak Company**

COLUMBIA-SOUTHERN®

PITTCHLOR®

HIGH-TEST CALCIUM HYPOCHLORITE

70% Available Chlorine

3¾ lb., 5 lb. Cans

100 lb., 130 lb. Drums

COLUMBIA-SOUTHERN CHEMICAL CORPORATION

SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY

ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Boston • Charlotte • Chicago • Cincinnati Cleveland • Dallas • Houston Minneapolis • New Orleans New York • Philadelphia • Pittsburgh • St. Louis • San Francisco

SILICATE OF SODA

40° and 60°

EXPORT — DOMESTIC

TURPENTINE — LINSEED OIL — MINERAL SPIRITS

CHAS. L. READ & CO., Inc. 1 Newark Ave., Jersey City 2, N. J.

Telephone WOrth 4-1131-2-3 DElaware 2-2062-3

Manufacturers of

Red and Black COPPER OXIDE

COPPER SCALE

ROBERT A. COUPE, 260 Rhode Island Ave., PAWTUCKET, R. I.

Telephone PAwtucket 3-4944

Detergent ALKANE*

Detergent Slurry

Detergent D-40

Detergent D-60

Dispersant NI-O

Dispersant NI-W

Wetting Agents

Gas Odorants

Lube Oil Additives

Purified Sulfonate "L"

Polybutenes

Phenol

call

ORONITE

Acetone

Isophthalic

Phthalic Anhydride

Maleic Anhydride

Naphthenic Acids

Cresylic Acids

Aliphatic Acid

Para-Xylene

Meta-Xylene

Ortho-Xylene

Xylol

Hydroformer Catalyst

Hydrogenation Catalyst

Basic Chemicals for Industry

Contact the Oronite office nearest you for technical bulletins and further information

ORONITE CHEMICAL COMPANY

EXECUTIVE OFFICES: 200 Bush Street, San Francisco 20, California

SALES OFFICES

450 Mission Street, San Francisco 5, Calif. Mercantile Securities Bldg., Dallas 1, Texas

30 Rockefeller Plaza, New York 20, N. Y. Carew Tower, Cincinnati 2, Ohio

20 North Wacker Drive, Chicago 6, Illinois 714 W. Olympic Blvd., Los Angeles 15, Calif.

EUROPEAN OFFICE

36, Avenue William-Favre, Geneva, Switzerland

*T. M.

4059

Heavy Chemicals

Boric acid is being made in anhydrous form by all three major borax producers. Recently, a producer lowered prices on 100-mesh and 200-mesh anhydrous in cases. However, the bag carlot price on 20-60 mesh anhydrous boric acid has been maintained. One factor in increased interest in anhydrous boric acid has been the chemical fuels program for missiles and jet aircraft, which at present promises to employ boron, hydrogen and carbon as fuel, as well as lithium borohydride. Organic boron compounds have also been developing over a broad pattern.

The advance made in bromine by a producer in February has been recently rescinded, and prices have returned to former levels. However, bromides as of last week displayed an unchanged price structure.

Mineral acid deliveries to the steel industry were adversely affected by the creeping decline in steel production. Last week, steel output dropped below 90 percent of capacity for the first time since last summer's steel strike.

The alkali industry reported moderately increased soda ash sales. Caustic soda demand has not been overly active, but spotty business has been counterbalanced by a decrease in supplies owing to cutbacks in chlorine output.

Sales of open market lime last year declined slightly below those for the previous year. December sales in 1956 were off somewhat from November levels.

Chromium (chromite) consumption during January was off 10 percent for chemical use, according to reports compiled by the Bureau of Mines.

The American Paper and Pulp Association reported production for the week ended April 13 at 93.3 percent of theoretical capacity, as compared with the revised figure of 95.2 percent for the previous week, and 103.7 percent for the corresponding week of last year.

Price Trends

Advanced

Potassium stannate, 9/10c. per lb.
Sodium stannate, 1c. per lb.
Stannic chloride, 9/10c. per lb.
Stannic oxide, 1c. per lb.
Stannous chloride, anhyd., 1.2c. per lb.
Hydrous, cryst., 1c. per lb.
Stannous sulfate, 1.2c. per lb.
Tin, 1¼c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
104.40	104.40	104.14	101.57

For Current Prices See Page 9

Fertilizer inquiry remained fairly active for use in the manufacture of superphosphates and ammonium sulfate. Rayon demand was moderate.

Acids

Boric—All three borax producers are now putting out anhydrous boric acid in the twenty-to-sixty mesh grade. This material is currently quoted at $335 per ton, paper sacks, carlots, f.o.b. works.

Recent interest in boron and boric oxide for the chemical fuels program has spurred output and sales, it was reported. Other interest as well for use in a number of organic boron compounds has stimulated trade.

Hydrochloric — Demand was not as strong last week as that reported for previous weeks. One factor in the slight slump in sales during recent months has been the slow decline of steel production.

Other end uses in part have taken up the slack caused by the decline in steel output, but not sufficiently enough to use up currently heavy production.

Output of hydrochloric acid has been in large volume in the past few weeks, primarily because of stepped up production of pesticides. Discounting has been reported in the south, and competition has remained keen in the New York area.

Sulfuric—Steel output continued to slide. Production was estimated last week at 89.7 percent of capacity, or 2,297,000 tons, as against 90.3 percent of capacity the previous week, or 2,310,000 tons, and 2,466,000 tons, or 100.2 percent of 1956 capacity during the corresponding week a year ago.

Bases and Salts

Bromine—The price advance in this halogen announced by a producer early in February has been rescinded. Reason for the return to earlier quotations was that others did not meet the proposed increase.

Caustic Soda—Shipments of rayon and acetate by United States producers totaled 92,500,000 pounds in March, a slight increase over the 92,200,000 pounds shipped the previous month, but 9 percent less than shipments in the corresponding month of 1956, according to the Textile Economics Bureau.

March shipments included 89.900,000 pounds to domestic consumers and 2,600,000 pounds for export. Shipments of rayon and acetate in the first quarter totaled 295,100,000 pounds, 8½ percent below the 323,300,000 pounds shipped in the first quarter of 1956.

Producers' stocks of rayon and acetate on March 31 totaled 112,200,000 pounds, 25 percent above the 89,600,000 pounds held at the end of the first quarter of 1956.

Chlorine—Consuming demand for the manufacture of pesticides has been quite active during the past few weeks. There has so far been a plentiful supply position despite the strike at the works of a producer in the southwest.

Copper Sulfate—Shipment of copper sulfate in February amounted to 3,963 tons, and were 38 percent below January (6,420 tons), according to the Bureau of Mines. This was the lowest monthly rate since January, 1956.

Production dropped 5 percent, to 5,424 tons in February from 5,704 tons in January, but was 1,500 tons in excess of shipments, and stocks rose 41 percent, to 4,420 tons.

Lime—In December 1956, domestic sales of open-market lime (764,063 short tons) decreased slightly from the previous month, according to reports by producers to the Bureau of Mines.

Sales of lime for the twelve-month period January through December, 1956, totaled 9,176,673 short tons, compared to 9,229,832 short tons for the same period of 1955.

Sodium Bicarbonate—Demand from the

Inorganic Chemicals Output: January

The following figures compiled by the Bureau of Census indicate production of industrially important inorganic chemicals, in tons.

	January	December
Aluminum chloride, anhyd.	2,961	3,086
liq., cryst.	972	848
Calcium carbide	89,275	92,793
Carbon dioxide, liq., gas.	23,896	24,435
solid	29,937	32,354
Chlorine gas	334,403	341,125
Chromic acid	2,779	1,222
Hydrochloric acid	77,779	78,875
Hydrofluoric acid	6,808	6,249
Nitric acid	237,520	231,630
Phosphoric acid	337,493	275,711
Phosphorus, elemental	28,779	27,707
Phosphorus oxychloride	1,280	1,292
Phosphorus trichloride	1,643	1,270
Potash, caustic, liq.	7,433	6,866
solid	1,935	1,606
Soda ash, light	197,085	202,306
dense	148,911	157,571
natural	56,588	52,514
Soda, caustic, liquid	365,413	375,554
dry	48,134	48,574
Sodium bicarbonate	8,166	8,168
Sodium chlorate	4,949	5,324
Sodium metal	11,658	11,743
Sodium phosphate, mono.	784	656
Dibasic	2,289	2,314
Tribasic	3,879	3,703
Meta	5,367	4,260
Tetra	8,181	8,395
Acid pyro	1,321	1,161
Tripoly	55,833	45,009
Sodium silicate	55,869	50,677
Sodium sulfate, anhyd.	24,820	25,662
Glaubers salt	10,223	8,573
Salt cake, crude	66,434	66,692
Sodium sulfide, conc.	1,927	2,266
other	1,909	1,785
Sulfur dioxide	6,097	5,240
Sulfuric acid, gross	1,387,266	1,339,401

Heavy Chemicals

prepared baking mix industry continued well sustained. Trade sources estimate that inquiry from this direction accounts for over half of the bicarbonate sold today.

Sodium Sulfate—There was plenty of saltcake around to fill consumer needs. While rayon, bichromates and Mannheim hydrochloric acid, three major sources of saltcake, have edged downward in the last few months, so also has the major consumer of cake, the paper industry.

Paper industry production has not reached the levels it set a year ago at this time, and in recent weeks, output has been running from 5 to 9 percent below capacity.

There has been a definite flattening out in demand for paper in evidence for some time, and with this in view, paper producers reportedly are beginning to stretch out their expansion goal deadlines.

Sulfur—The following figures represent production, shipments and stock of sulfur of a purity of 97 percent or greater during specified periods in the United States, in tons:

	January	*December*
Native production	495,353	534,088
Shipments	419,324	467,310
Sales *	433,892	449,666
Stocks †	3,997,911	3,936,450
Recovered production	42,154	43,750
Shipments	43,013	43,860
Sales *	43,304	43,461
Stocks †	118,296	119,446

* Calculated from production and change in stocks during the period.
† Producers' stocks at mines or plants in transit, and in warehouse at end of period.

Tin Chemicals—With higher tin, potassium stannate was quoted at 77.6c. to 84.8c. per pound; sodium stannate, 63.3c. to 69.2c.; stannic chloride, 79c. to 80c.; stannic oxide, $1.05½ to $1.06½; anhydrous stannous chloride, 91.5c. to $1.409; hydrous crystals, 80c. to 81c.; and sulfate, $1.05 to $1.07.

Nonferrous Metals

Chromium—Total consumption of chromite during the month of January declined 3 percent compared with the month of December, 1956, according to the Bureau of Mines. Metallurgical use dropped over 8 percent, but refractory and chemical uses increased 10 percent and 3 percent, respectively.

In the manufacture of 45,347 short tons of ferrochromium, chromium metal, and other chromium alloys, the metallurgical industry consumed 109,468 short tons of Chromite that averaged 47.06 percent Cr_2O_3; 91.003 tons (48.65 percent Cr_2O_3) was reported as metallurgical grade, 11,963 tons chemical (41.67 percent Cr_2O_3), and 6,502 tons refractory (34.74 percent Cr_2O_3).

Of the metallurgical grade 71 percent had a Cr/Fe ratio of 3:1, 28 percent had less than 3:1 but at least 2:1 Cr/Fe ratio, and 1 percent had less than 2:1 Cr/Fe ratio. The metallurgical industry also used a small quantity of ore in direct additions to steel.

The refractory industry consumed 43,198 tons (34.33 percent Cr_2O_3) of chromite in the production of refractories, and chromite used by the chemical industry in the production of 9,323 tons of chromium chemicals (sodium bichromate equivalent) totaled 12,458 tons, that averaged 44.67 percent Cr_2O_3.

Stocks of chromium alloys and metal at producers' plants at the end of January, totaled 57,650 short tons, and chemical stocks on hand were 13,722 tons.

Domestic production (shipments) of chromite in January totaled 12,313 short tons, natural weight. On a dry weight basis, California shipped 2,103 tons, Montana, 9,149 tons, and Oregon 501 tons.

Copper — Primary producers' prices held at 32c. per pound, delivered US destinations, last week.

Selenium—There was increased evidence last week that this market was soft, despite recently reduced prices for metal.

Tin—Metal edged slightly higher in quiet trading during the week, and was quoted Friday at $1 per pound, spot.

Zinc—The following figures, in tons, indicate total slab zinc smelter output and stocks according to American Zinc Institute.

Production	*March*	*February*
Special high grade	30,491	29,067
High grade	14,482	15,013
Intermediate	3,238	2,515
Prime western	48,504	41,483
Total	96,715	88,078
Stocks	*March*	*February*
Special high grade	24,993	27,155
High grade	10,807	7,002
Intermediate	4,863	3,017
Prime western	48,678	49,715
Total	89,341	86,889

Chlorine Institute Meeting Slated for Abescon, N. J.

The Chlorine Institute will hold its spring meeting at the Seaview Country Club, Absecon, N. J., on May 13 and 14, according to Bert Cremers, vice-president of Wyandotte Chemical Corporation, and president of the Institute.

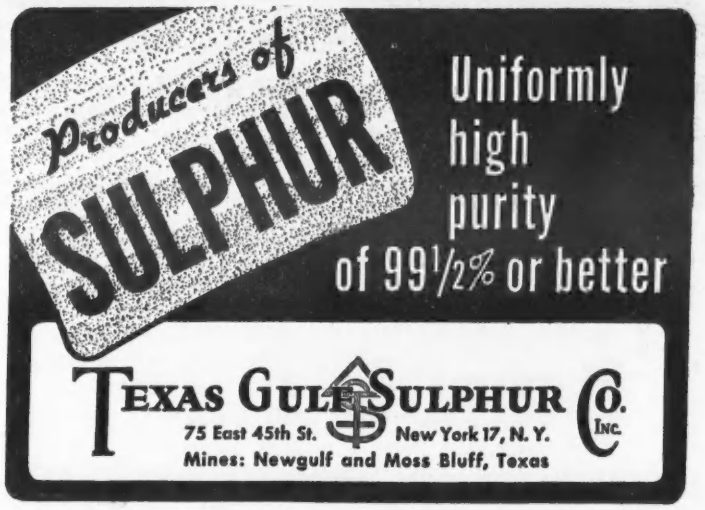
The board of directors and the committee on container specifications and safety are scheduled to meet separately on May 13. Chlorine plant managers will meet on the following day.

Hunt Sets Up Export Unit

Philip A. Hunt Company has established its export department in new headquarters at 11 West 42nd street, New York 36. Anthony J. Endres has been appointed export manager.

European Chemical Moves Office

European chemical Company, New York, has moved its offices to 124 east 40th street in that city. The new telephone number is YUkon 6-7250.


Producers of
SULPHUR
Uniformly high purity of 99½% or better
TEXAS GULF SULPHUR CO. INC.
75 East 45th St. New York 17, N. Y.
Mines: Newgulf and Moss Bluff, Texas

how Triangle Brand Copper Sulphate
PHELPS DODGE REFINING CORPORATION
TRIANGLE BRAND
REG.U.S PAT.OFF.
CHEMICALS
NEW YORK
SERVES INDUSTRY
AGRICULTURE
as an active ingredient of Bordeaux Mixture sprays and dusts for the control of plant diseases and as an ingredient in fertilizers for copper deficient soil.
WATER WORKS
as an algicide to clarify water, and to eliminate root and fungus growths in sanitary sewers and storm drains.
WOOD PRESERVING
Triangle Brand Copper Sulphate is a superior wood preservative. Inexpensive—long-lasting. Prevents decay and termite damage.
PLATING
as an electrolyte for copper-plating and for coloring metals.
PETROLEUM
as a reagent for the oil sweetening process, and as a catalyst in the production of high-octane gasoline.
MINING
as a flotation reagent in the treatment of lead and zinc ores.
CHEMICAL MANUFACTURING
as a raw material used in making chemical and other copper compounds.
PIGMENT MANUFACTURING
as a starting material for making green and blue pigments, such as Brunswick Green, Scheele's Green, etc.
TEXTILE
as a mordant in textile dyeing and calico printing.
BASIC COPPER SULPHATE
NICKEL SULPHATE
SELENIUM
TELLURIUM
We will be glad to send you detailed information on the use of Triangle Brand Copper Sulphate in its various applications.
PHELPS DODGE REFINING CORPORATION
300 Park Ave., New York 22, N. Y. • 5310 W. 66th St., Chicago 38, Ill.

A FLICK OF YOUR DIAL BRINGS FAST DELIVERY OF . . .

MONSANTO

ALUM

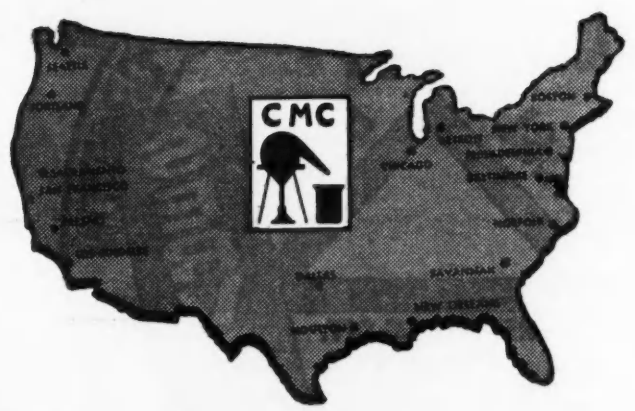
(All Grades)

CALL ANY MONSANTO OFFICE:

St. Louis • Atlanta
Boston • Chicago
Cincinnati • Cleveland
Detroit • Houston
Los Angeles • New York
San Francisco • Montreal

WHERE CREATIVE CHEMISTRY WORKS WONDERS FOR YOU

Quality + Distribution = Service



IMPERIAL CHEMICAL INDUSTRIES LIMITED

Ammonium Chloride, Grey and White • Ammonium Bicarbonate USP • Ammonium Carbonate • Bleaching Powder Tropical 34%-36% Cl_2 • Calcium Formate • Chlorinated Paraffin 42% Cl_2 • Chlorinated Rubber • Copper Cyanide • Potassium Cyanide • Sodium Cyanide, all grades • Zinc Cyanide • Sodium Aluminate • Sodium Bicarbonate USP and Tech. • Sodium Carbonate Monohydrate • Sodium Perborate • Trichlorethylene, all grades • Urea, 46% Tech. • 3,3,5 Trimethyl Hexanol • 2:4 Dimethyl 6-Tertiary Butyl Phenol

PETER SPENCE & SONS LIMITED

Aluminum Sulphate, Iron Free • Ammonia Alum • Butyl Titanate • Potassium Alum • Titanium Potassium Oxylate • Cobalt Molybdenum Catalysts

DEEPWATER CHEMICAL CO., LIMITED

Iodine, Resublimed USP and Reagent * Potassium Iodide, USP and Reagent * Potassium Iodate, USP and Reagent * Special Potassium Iodide Mixtures * Cuprous Iodide, Tech.

LCL quantities available from Distributor Stocks in your area. This is only a partial listing of the items we offer. Write for complete product listings.

CHEMICAL MANUFACTURING CO., INC.

714 W. Olympic Boulevard, Los Angeles 15, Calif., Richmond 9-4379
444 Madison Avenue, New York 22, N. Y., MUrray Hill 8-8700
114 Sansome Street, San Francisco 4, Calif., YUkon 6-3787

Obituaries

Walter A. Sampson

Walter Alden Sampson, president of Wasco Engineering Corporation, a manufacturer of chemicals, in New York, died April 14 in New Rochelle, N. Y. He was seventy-five years old.

Leland E. Stowell

Leland E. Stowell, retired president of Arlington Chemical Company, Yonkers, N. Y., died April 14 in Scarsdale, N. Y. He was sixty-four years old. He was formerly with United States Trust Company in New York.

G. Stewart Brown, director of public relations of Standard Oil Company of California, died April 11 in San Francisco, Calif. He was fifty years old. He had been head of Standard of California's public relations department since 1948.

Richard B. Bohaker, a sales representative for thirty-four years with Stein, Hall & Co., died April 10 in New York. He was seventy-four years old.

Frederick Bonner Flinn, retired director of industrial hygiene at the Columbia University College of Physicians and Surgeons, died April 8 in Castro Valley, Calif. He was eighty years old. Prior to his retirement in 1946, Dr. Flinn was also director of studies at the Delmar Institute of Public Health at Columbia.

Wilfred W. Lufkin, jr., vice-president of Celanese Corporation of America, died April 12 in New York. He was fifty-four years old. Mr. Lufkin had been with Celanese since 1955. Prior to that he had been president of Wellington Sears Company.

Thorvald Madsen, director of Denmark's Serum Institute from 1902 to 1940, died April 15 in Copenhagen, Denmark. He was eighty-seven years old. Dr. Madsen was a leader in the movement to establish biological standardization of serums and vaccines on an international level.

Hooker Fills Board Post

Hooker Electrochemical Company, Niagara Falls, N. Y., has elected Frank W. Dennis to the board of directors replacing J. H. Babcock, who will retire May 1.

ICA Authorizes Funds For Drugs, Fats, Oils

The International Cooperation Administration has issued an authorization to Turkey of $1,175,000 for procurement of medical and pharmaceutical supplies from world sources.

Bolivia has received an authorization to purchase $630,000 of fats and oils from United States sources.

AMMONIUM BIFLUORIDE
SODIUM FLUORIDE
HYDROFLUROIC ACID

BERKSHIRE CHEMICALS

ISCO

POTASSIUM TITANIUM FLUORIDE
POTASSIUM ZIRCONIUM FLUORIDE

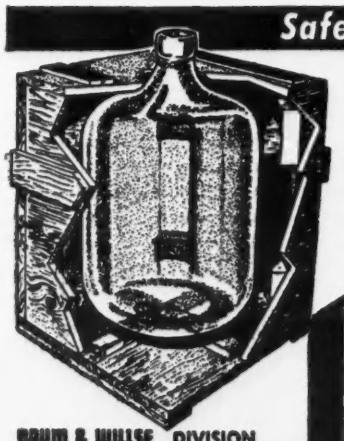
BERKSHIRE CHEMICALS, INC.
420 LEXINGTON AVENUE • NEW YORK 17
55 New Montgomery St. • San Francisco 5, Cal.
Innis Speiden Company Division
New York • Philadelphia • Boston • Cleveland • Chicago

SODIUM SILICOFLUORIDE — **BLOCKSON**

BLOCKSON CHEMICAL COMPANY • Joliet, Ill. • *Division of Olin Mathieson Chemical Corporation*

SODIUM FERROCYANIDE
(Yellow Prussiate of Soda)
HENRY BOWER CHEMICAL MFG. CO.
30th AND GRAYS FERRY RD. PHILADELPHIA 46, PENNA.

Safer! Stronger! Cost-Cutting!



Aero RUBBER-CUSHIONED
STANDARD CORK-CUSHIONED
CARBOY BOXES
5 - 6½ - 13 Gal.

Longer-life, lower breakage, precision-made carboy boxes, built to I. C. C. specifications. Proof against rough handling and long-haul hazards. Cork or rubber-cushioned: The Strongest and Safest Made. Prompt service and deliveries.

5, 6½ and 13-Gal. **PLASTIC** BOTTLES
Encased in "POLY-STANDARD" CARBOY BOXES. Approved ICC-1G. Durable. Light weight.

BAUM & WILLSE DIVISION
UNITED BOX & LUMBER CO.
45 Wheeler Point Road
NEWARK 5, N. J.
MArket 3-4500

Extra GLASS & PLASTIC Bottles All Sizes • From 1 to a Carload

Serving entire chemical industry over 35 years
Inquiries cordially invited

Stay ahead of the game on magnesium compounds

You can be a winner every time with magnesium compounds from Merck. Our Marine Magnesium Division assures top-notch quality and technical service for the rubber, plastics, paint, ink, drug, cosmetic and chemical industries.

Our distributors from coast to coast can make speedy delivery on any of these Merck Magnesium Compounds:

MAGLITE® D, M, L, and K
HYDRO-MAGMA® (Magnesium Hydroxide in Water)
MAGCAL® (Inactive Magnesium Oxide)
MARINCATE T.M. (Magnesium Trisilicate, U.S.P. and Tech.)
MARINCO® (Magnesium Hydroxide, N.F. and Tech.)
MARINCO® BRAND MAGNESIUM CARBONATE, (U.S.P. and Tech.)
MARINCO® BRAND MAGNESIUM OXIDE, (U.S.P. and Tech.)

For additional information and samples, write Department M-751, Merck & Co., Inc. Marine Magnesium Division, Rahway, N. J.

DISTRIBUTORS:

THE C. P. HALL CO.
G. S. ROBBINS & CO., INC.
WHITTAKER, CLARK & DANIELS, INC.

MERCK

© Merck & Co., Inc.

Tin, Tungsten Recovery Methods Developed by Gov't

Bureau of Mines researchers have developed on a laboratory scale four possible methods for recovering tin and tungsten from slags at the Longhorn tin smelter, Texas City, Tex., according to a report released by the Department of the Interior.

If further research shows that any of the methods are economically feasible on a large scale, the way will be opened to recover several million pounds of these valuable metals from stockpiled slags at Texas City. In addition, the bureau said, the process might be used to treat slags at tin-smelting operations in other countries.

According to the report, slag discarded at tin smelters the world over contains 1 to 3 percent tin and that at Texas City averages 1 to 1½ percent tin and ½ to 1 percent tungstic oxide.

In the laboratory tests on the Texas City slags, a recovery of 90 percent of the tin and tungsten was indicated. The report states that several areas of study should be investigated in the future; among these it cites sharper separation of tin and tungsten, separation of iron from each of these products, and larger scale experiments to obtain more conclusive information than can be gained in the laboratory.

A copy of Report of Investigations 5327, "Recovery of Tin and Tungsten from Tin-Smelter Slags," by H. Kenworthy, A. G. Starliper, and L. L. Freeman of the bureau's Mississippi Valley experiment station at Rolla, Mo., can be obtained from the Bureau of Mines, Publications-Distribution Section, 4800 Forbes Street, Pittsburgh 13, Pa. It should be identified by number and title.

Pfizer Elects Thompson, Cooney to New Posts

J. Jerome Thompson has been elected to the new post of vice-president in charge of agricultural sales of Chas. Pfizer & Co., Brooklyn, N. Y. Thomas M. Cooney has been named an assistant secretary.

Mr. Thompson has been manager of Pfizer's agricultural sales division since it was established in 1952. Mr. Cooney has been a member of the legal staff since 1955.

Barbiturate Bill

—Continued from page 3

of Foods and Drugs, testified that additional federal controls over the two drugs has become necessary because the present law does not provide suitable means for detecting diversions of the drugs from legitimate channels.

He said that the problem is not being handled adequately by the states because many of the state laws are inadequate, and the level of enforcement prevailing in most states is low.

None of the state or local enforcement agencies, he added, have adequate resources for good enforcement of a "sale only on prescription" law.

Chairman Williams first questioned the advisability of making unauthorized possession of the drugs a federal offense and compared it to the enforcement of the liquor laws.

He feared that it would be "the little fellow with a few barbiturates in his pocket" who would feel the effects of the law, and that the big operators who are the suppliers of the drug would find a way to escape prosecution.

Mr. Williams next raised questions whether illegal sale of the drug at the local level is not essentially a matter of state enforcement, rather than one for the federal government to handle.

He referred to a report of the Bureau of the Budget on the bill which, while entering no opposition to the measure, stressed the importance of greater state control efforts in the field of illicit drug traffic.

The chairman feared that if the bill was enacted, it would pre-empt state action in this area. Mr. Harvey and William Goodrich, counsel for FDA, denied that this would be the case, but they failed to satisfy Mr. Williams on this score.

He suggested that they prepare additional testimony on this point, because "The committee will want to hear a lot more on this question of federal-state jurisdictions."

Rep. Will Neal of West Virginia asked whether the job of policing illegal sales could not be handled better by the Bureau of Narcotics. He believed it could be.

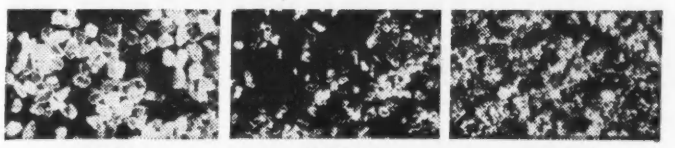
He brought out for Mr. Harvey the fact that an additional fifty agents would have to be hired by FDA as a starter with more to be added to the payrolls later if the problem remained uncontrolled.

Which size of PARADI® is just right for you?

These are actual size photos.

PEA NO. 1 | PEA NO. 2 | RICE NO. 1

These sizes offer you a ready-made, balanced "line" for repackaging. The uniform, sparkling crystals sublime completely, without stain or residue.



RICE NO. 2 | RICE NO. 3 | POWDERED

Extra free-flowing. For automatic presses where dies must be refilled rapidly.

Sized especially for foot presses. Free-flowing, yet packs with very little effort.

Fine, uniform, fast-melting. Molds into bright, non-oozing blocks and pellets.

You can get PARADI (100% pure Hooker paradichlorobenzene) in fiber drums—25, 50, 100, or 200 lbs. net. For 1-lb. samples of sizes that match your needs, write us today on your business letterhead.

For resale as a farm pesticide and weed killer, try our 7th form, *granulated* PARADI (not shown).

HOOKER ELECTROCHEMICAL COMPANY
804-4 Forty-seventh Street, Niagara Falls, N. Y.
Niagara Falls • Tacoma • Montague, Mich. • New York • Chicago • Los Angeles

HOOKER CHEMICALS PLASTICS

Pure, uniform— and prompt delivery from stock!

WYANDOTTE BICARB

Uniform Particle Size—Assured physical uniformity in each grade and screen size of Wyandotte Bicarb provides free flow, easy blending!

Maximum Chemical Purity—Wyandotte Bicarb is chemically pure—important for the *quality* and *appearance* of your product!

Delivery from Distributor Stocks—You can get Wyandotte Bicarb right from stock—prompt delivery, thanks to strategically located plant and distributors!

Exact Quantity You Want—You can order Wyandotte Sodium Bicarbonate in the exact quantity you need: bag, drum, or carload!

Technical Help—Wyandotte's expert technical service and unsurpassed research facilities are available to help you.

ORDERING BICARB? MAKE SURE YOU GET IT FROM . . .

Wyandotte CHEMICALS

MICHIGAN ALKALI DIVISION • HEADQUARTERS FOR ALKALIES

WYANDOTTE CHEMICALS

WYANDOTTE CHEMICALS CORPORATION, WYANDOTTE, MICHIGAN • *Offices in Principal Cities*

Ammonium Nitrate Solutions

Available in Tank Cars

NITROGEN DIVISION ALLIED CHEMICAL

Other Nitrogen Division Products

Ammonia Liquor
Ammonium Nitrate Solutions
Ammonium Sulphate
Anhydrous Ammonia
Industrial Grade
Refrigeration Grade
Ethylene Glycols
Ethylene Oxide
Ethanolamines
Formaldehyde
Methanol
Mixed Oxides
Nitrogen Tetroxide
ARCADIAN® Nitrate of Soda
U.F. Concentrate-85
Urea

NITROGEN DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.
Hopewell, Va. • Ironton, Ohio • Orange, Tex. • Omaha, Neb.

Anhydrous
SODIUM ACETATE

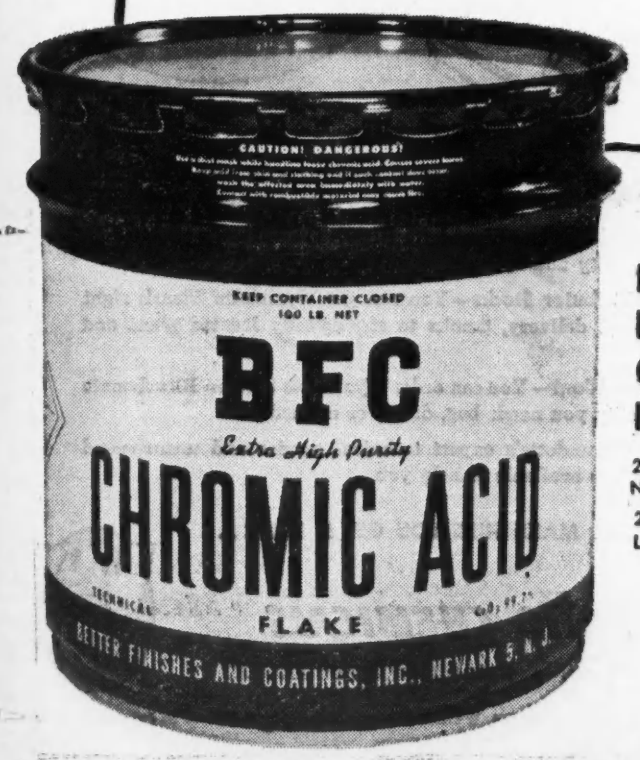
E. M. SERGEANT PULP AND CHEMICAL CO., INC.
7 DEY STREET Established 1867 NEW YORK 7, N. Y.

Richest Man in the Cemetery

"Live and let live", that's our motto, during and after office hours. We've long realized that we started too late to catch up with the big-money boys of yesteryear.

So if we can't make *all* the Chromic Acid in the world, we'll settle for making an extra high-quality grade and doing business with a lot of nice people who appreciate good service and fair dealing.

If that means you, we'll appreciate a modest order next time you're in the market for Chromic Acid. We're sure you'll like the quality of BFC Chromic Acid and the friendly way we do business.



PAINTS · PLASTICS · CHEMICALS BFC

BETTER FINISHES & COATINGS, INC.

268 Doremus Avenue
Newark 5, N. J.
2014 East 15th St.
Los Angeles 21, Calif.

Jobs & People

Bakelite Company, New York, a division of Union Carbide & Carbon Corporation—**W. J. Canavan** has been named assistant manager of the new product engineering department, and **M. M. Suba** has been named manager of the extrusion materials division.

Barrett Division of Allied Chemical & Dye Corporation, New York—**Joseph McGaw** has joined the staff of the research and development department, and **Martin Gurevitch** has been appointed a chemical engineer in that department.

Beckman Instruments, Inc., Fullerton, Calif.—The scientific instruments division has appointed **Paul E. Paules** western regional sales manager, **Jack A. Challacombe** Los Angeles district manager, **Robert A. Vanderveld** Houston, Texas district manager, and **A. Donald Herbert**, Buffalo, N. Y., district manager.

Bristol Laboratories, Inc., Syracuse, N. Y.—**K. V. Lyon** has been named central southeastern area manager, **George M. French** southeastern and southwestern supervisor, and **Walter Smith** regional manager for the midwest and eastern part of the country.

William Downie Company, Cleveland, Ohio—**Donald G. Schaffer** has been elected president, succeeding **William Downie**, who has been named chairman.

Eastman Kodak Company, Rochester, N. Y.—**Thomas J. Hargrave**, chairman of the board, has accepted the chairmanship of the chemical division of the National Fund for Medical Education.

General Aniline & Film Corporation, New York—**Warren M. Dewing** has been appointed New England branch manager for dyestuff sales, succeeding **Wilfred A. Lord**, who recently retired after fifty years of continuous employment in the dyestuffs field.

General Dyestuff Company, New York, a division of General Aniline & Film Corporation—**A. L. Sanchirico** has been appointed a sales representative of the pigment division for the midwest, working out of the company's Chicago office.

Glidden Company, Cleveland, Ohio—**Robert T. Stroemple** has been named assistant director of the paint division. His duties will include development of new branches, market evaluation, location surveys and promotion of sales.

W. R. Grace & Co., New York—Grace's Polymer Chemicals division has appointed **Norman F. Smith** technical representative in the marketing department. **Albert Spaak** has been named injection molding engineer for the technical service department. **Ruben Thevenet** has been assigned to the technical service unit as a plastics extrusion engineer.

B. F. Goodrich Chemical Company, Cleveland, Ohio—**William K. Taft, jr.**, has rejoined the company after two years' military service. He will be assigned to the Akron, Ohio, experimental station. **A. R. Webber** has been reassigned to work on economic planning of production operations. **Charles J. Scates** has been promoted to technical man at the company's Calvert City, Ky., plant.

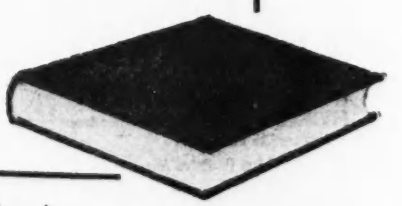
National Starch Products, Inc., New York—**John Doherty, Emil Mazzarella**, and **Donald S. Greif** have been promoted to supervisory positions in the converting, general application and coating units respectively.

Olin Mathieson Chemical Corporation, New York—**Forrest F. Tiffany** has joined the company as sales manager for the Cincinnati-Dallas division for Olin Aluminum. **Fred H. Edgar** has been named sales manager for the Detroit-Cleveland area.

MINERALS IN WORLD INDUSTRY

by WALTER H. VOSKUIL

Chief Mineral Economist, Ill. State Geol. Survey; Prof. of Mineral Economics, Coll. of Engr. Univ. of Illinois. 324 pp., 24 maps, 37 tables, $5.75



In simple, non-technical language this book describes the part played by minerals in economic productivity and in building and maintaining a high standard of living. Throughout it emphasizes the role of minerals in developing a distinctive American culture.

Step by step the book takes you from the functions of minerals in industry through the interests of the United States in the distribution and extent of the world's mineral resources. It treats in detail the particular contribution of each mineral to our productive economy. Included are iron, ferroalloys, coal, oil, gas, nonferrous metals, mineral plant foods, and sulfur.

The discussion includes a comprehensive treatment of the ramifications of America's mineral industry in world affairs.

CONTENTS

1. The Mineral Economy
2. Man and Iron
3. Geographic Pattern of the Steel Empires
4. Iron in the Americas
5. Iron in Europe
6. Iron in Asia, Australasia, and Africa
7. Iron Alloys
8. Coal in North America
9. Transportation of Coal in the United States—Anthracite
10. Coal in Europe
11. Coal in Asia, Australia, Africa and South America
12. Petroleum—A World View
13. The Petroleum Industry in North America
14. Petroleum in Foreign Nations
15. Natural Gas
16. Alternative Fuels
17. Copper
18. Lead and Zinc
19. Aluminum and Magnesium
20. Building Materials
21. Mineral Plant Foods—Nitrogen
22. Mineral Plant Foods—Phosphates
23. Mineral Plant Foods—Potash
24. Sulfur
25. Minerals Used in Minor Tonnages
26. American Mineral Policy
27. Relation of Industrial Nations to Undeveloped Areas

***Mail Order to* SCHNELL PUBLISHING COMPAMY, INC.**
30 Church Street, New York 7, N. Y.

Agricultural Chemicals

Material movement and sales in this market continued to show limitations as the result of weather conditions. The cold snaps and low level weather remaining in the north and to a lesser degree, in some areas of the south, held-up development of strong markets in those areas. In the animal proteins market, the faltering was reflected in a minor price shift: blood out of New York dipped 25 cents. However, this was not considered indicative of a market trend but rather a mark of the temporary tone of softness. Originally, dealers and producers had assumed that the market, because of a number of economic factors, would be a slow starter. This fact, coupled with the weather situation, has brought about an even softer position than had been anticipated. However, the weather situation despite its negative overtones has brought a touch of hope to one area of the market: the drought-ridden southwest has had water for the first time in six years. This fact, plus the soil bank program of the present administration, may bring the market this season up to a relatively good level, though reservations are held on both counts by interested parties in the market.

Price Trends

Advanced
None

Reduced
Blood, dried, 25c. per unit-ton.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
110.20	110.21	109.99	110.78

For Current Prices See Page 9

Animal and Plant Foods

Animal Proteins—Weather continued to play a major roll in this market, a dealer contended last week, as listless movement and restricted demand remained a key to the week. Continued cold throughout the northern reaches forestalled movement in that area, though sections further to the south showed improvement due to relatively stable warmth. The overall picture was a spotty one, a dealer said, with the trend toward the summer months but movement in that direction being slow. This coupled with the fact that an anticipated slow economic start has run true to expectations leads some dealers to assume that heavy buying in some areas is still to be expected.

The only price shift in this market was a minor one, a slight easing in Blood out of New York. The new price, $5.25 per pound is 25c. less than was previously quoted. The move is considered in no way a trend but rather a reflection of the temporary status of the market.

Production of fishmeal in 1956, according to a report by the Department of Interior, rose to a new record high. Producers normally accounting for 90 percent of total production reported 273,000 tons. Final reports will push the total close to a 295,000 tons figure. The report also noted that second quarter production for this year will rise seasonally. Imports of fishmeal declined in 1956 as domestic production increased. During the second quarter imports tapered off after rising to their annual peak in the first half.

Other feedstuff supplies continued to rise although they had more than doubled in the past 15 years. The wholesale price index for February was 6.2 points above a year earlier but 8.1 points below the same 1955 month.

Wholesale prices for fishmeal will decline as seasonal production rises the latter half of the second quarter, the report said. They still face stiff competition from seed meals which continue in heavy supply at low prices.

A statistical breakdown of this information shows that production in 1956 totaled the aforementioned 295,000 tons as compared with the 264,297 tons produced in 1955 and the 231,400 tons produced in 1954. Imports during this period amounted to only 91,411 tons in 1956 as compared with the 98,003 tons imported in 1955 and the 145,777 tons imported in 1954.

Lime—Domestic sales of open-market lime in December amounted to 764,063 tons, a slight decrease from the month previous according to reports by producers to the Bureau of Mines. Sales of lime for the twelve month period, January through December, 1956, amounted to 9,176,673 short tons compared to 9,229,832 short tons for the same period of 1955.

Total sale of lime for agricultural uses during December amounted to 12,138 short tons as compared to the 13,244 short tons sold in November and the 16,481 tons sold during December, 1955. Total sales of agricultural lime during the twelve-month period amounted to 228,313 short tons in 1956 as compared to 262,753 short tons in the year previous.

Broken down, these figures show that quicklime sales during December amounted to 6,912 short tons as compared with the 10,372 short tons sold during the previous December and the 7,439 sold during November. Total quicklime sales for agricultural use during 1956 amounted to 88,575 short tons as compared with the 103,467 figure for the year previous.

Pesticides

A recent Department of Agriculture report noted that there was a marked decrease in the over-all scope and severity of forest insect infestations in the United States during 1956. Although there was an upsurge in populations of a few important insect pests in some sections of the country, the report noted, the decline of other species elsewhere more than offset these increases. For the most part, the reduction of infestations, and a lessening of the damage and loss caused to the forest resources of the nation, was brought about by concerted efforts on the part of federal, state and private agencies to locate and promptly suppress epidemic populations of the destructive species. Natural control factors, of course, also were important in reducing pest populations in many instances.

DDT—The usual seasonal development in this material is beginning to take hold and dealers in both domestic and export sales report the market in an excellent position. Since this material on the whole is dependent to a lesser degree upon the agricultural market than most of the other pesticides, it was reported that seasonal sales soared upon reports of expected high demand in manufactured insecticides for use in home and industry as well as agriculture.

Malathion—This material has recently been registered with the Department of Agriculture for use against the boll weevil. According to a report, tests conducted by state and federal entomologists during 1956 were reported to have indicated that malathion provided successful boll weevil control in areas where the insect had developed resistance to, or was becoming more difficult to kill with, commonly used insecticides.

Ammonium Sulfate & Ammonia Liquor Data for February

The following information on production, sales and end-of-month stocks for ammonium sulfate and ammonia liquor covers data for January, February, 1957 and totals for the first months of 1957. The figures, according to the Bureau of Mines, are preliminary and are revised in final reports.

		February Quantity	% change	January, 1957	February, 1956
Production:					
Ammonium sulfate	pounds	142,831,654	11.6	161,544,303	158,226,272
Ammonia liquor (NH_3 content)	pounds	1,645,517	17.2	1,987,016	1,932,052
Sales:					
Ammonium sulfate	pounds	155,925,142	17.4	188,737,233	219,714,430
Ammonia liquor (NH_3 content)	pounds	1,645,517	17.2	1,987,016	1,932,052
Stocks, end of month:					
Ammonium sulfate	pounds	328,160,072	3.9	341,425,149	349,863,809
Ammonia liquor (NH_3 content)	pounds	3,275,321	2.4	3,199,942	3,427,996

A READY SUPPLY OF
Rotenone Resins
IS AS NEAR AS YOUR TELEPHONE
Need quality rotenone resins for garden sprays and aerosols, pet shampoos, household and plant aerosols, cattle sprays and washes? Call C. I. C. for a dependable source. You'll get rotenone resins that are brittle, crystal-clear, free from impurities... that readily dissolve in suitable solvents. Available also in oil soluble and emulsifiable concentrates.
Call ULster 2-5200
CIC CHEMICAL INSECTICIDE CORPORATION
129 Montague Street • Brooklyn, 1, N. Y. • Phone: ULster 2-5200
Plant - Metuchen, New Jersey

PROPER CONDITIONERS PROVE PROFITABLE AND BUILD GOOD WILL
Prompt and future shipments — Your inquiries invited
Telephones Phila :WOodlawn 6-7300 tOmbard 3-2288
THE DICKERSON COMPANY
139 North Broadway Camden 2, N. J.

DUVAL
MURIATE OF POTASH
SULPHUR
DUVAL SULPHUR and POTASH CO.
Exclusive Distributors
ASHCRAFT-WILKINSON CO.
ATLANTA, GEORGIA
Cable Address: Ashcraft
District Offices
Norfolk, Va. • Charleston, S.C. • Tampa, Fla.
Jackson, Miss. • Columbus, Ohio • Montgomery, Ala.
Des Moines, Ia.

Get it First.....
Get it All.....
Get it Straight.....
.....in OPD

Arcadian
YOUR HEADQUARTERS FOR NITROGEN
Ammonia Liquor • Anhydrous Ammonia • Urea Products
Ammonium Nitrate • Nitrogen Solutions • Nitrate of Soda
A-N-L® Fertilizer Compound • Sulphate of Ammonia
12-12-12 Granular Fertilizer
NITROGEN DIVISION Allied Chemical & Dye Corporation
40 Rector St., New York 6, N. Y.
Plants at Hopewell, Va. • Ironton, Ohio • Omaha 7, Neb.

OPD
Quickest way to keep current on Chemical Costs

P.C.A.
SALT of the EARTH
RED MURIATE
Producers of
Agricultural and Chemical Grade
MURIATE OF POTASH
POTASH COMPANY OF AMERICA
Carlsbad, New Mexico
General Sales Office... 1625 Eye Street, N. W., Washington, D. C.
Midwestern Sales Office... First National Bank Bldg., Peoria, Ill.
Southern Sales Office... Candler Building, Atlanta, Ga.

PROCTER & GAMBLE
General Offices: Cincinnati 1, Ohio and 155 East 44th Street, New York 17, N. Y.
Glycerine
ALL GRADES
9 CONVENIENTLY LOCATED PRODUCING AND REFINING PLANTS ASSURE PROMPT SHIPMENTS AND DELIVERIES

LEVER BROTHERS COMPANY
Producers and Refiners of
NATURAL GLYCERINE
390 Park Avenue New York 22, N. Y.

RANEY CATALYST CO.
Originators and Dependable Suppliers of
RANEY CATALYSTS
718 Hamilton National Bank Bldg.
Chattanooga 2, Tenn.
Since 1925 Phones: 6-8616, Taylor 1-7823 Cable Address: RANI

INTERMEDIATES
at competitive prices
PIPERAZINE (Base and Salts)
BETAINE (Base and Hydrochloride)
CHOLINE BASE (in Methanol)
p-AMINOBENZOIC ACID
p-NITROBENZOIC ACID
p-HYDROXYBENZOIC ACID
CHEMO PURO MFG. CORPORATION
150 DOREMUS AVENUE
NEWARK 5, N. J.

Aliphatic Organics

Butadiene was traded in heavy volume last week, and demand continued notably strong. Consumers were experiencing little if any difficulty in obtaining sufficient material to cover immediate and short-term needs, however. Production has been sustained at a high level, and substantial new plant capacity was coming into the market. Trade sources anticipated no shortages during the balance of the current calendar year. It was noted that both world production and world consumption of synthetic rubber during 1956 exceeded corresponding data for any previous year. While consumption of rubber for tire manufacture was a bit disappointing so far this year, other consumer channels have given the market rather good support.

Minimum price for blackstrap molasses at New Orleans declined ½ cent per gallon in the week ended last Tuesday, Agricultural Marketing Service reported. In common with most other points in the south and middle west, New Orleans demand continued slow, with supply adequate, as buyers stood on the sidelines waiting to see just how long the trend of declining prices would prevail. Sales were confined almost entirely to enough volume to take care of immediate requirements.

Typical of most points in the east and far west, the New York blackstrap market was characterized by moderate demand and adequate supply at unchanged prices.

As of March 31, it was reported, production of blackstrap from the 1957 Cuban sugar crop was running 13.9 million gallons ahead, as compared to output from the 1956 crop as of the same date a year earlier, with the yield per short ton of raw sugar this year 0.7 gallons lower.

Demand for its use in production of phenolics and urea-formaldehyde resins was supporting trade in formaldehyde in moderate volume.

Largely dependent on the market in alkyd resins, which has been rather slow, pentaerythritol was described as just fair, with volume a little heavier than it was in fourth quarter 1956 and just about the same as it was a year ago. Some consumers indicated a preference for dipentaerythritol, which, since its production consisted entirely of that yielded as a byproduct of PE and was strictly limited, was chronically in short supply.

New cumene process facilities were augmenting production of acetone, which was now in ample supply to take care of current heavy demands for its use in manufacture of methyl methacrylate and diverse other end products. Over-all demand for acetone remained steady in fairly heavy volume, with prices stable and generally firm.

Carbon tetrachloride, just a little quieter than it had been a few months ago, was moving in good volume into use as a propellant for aerosol sprays.

In common with many solvents that were closely geared to the general level of business activity, perchloroethylene and trichloroethylene were easier than they had been several months ago but were still in fairly good balance. Both were in rather strong demand for use in metal degreasing operations.

Price Trends

Advanced
None
Reduced
Molasses, New Orleans, ½c. per gal.
Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
131.30	131.30	130.77	131.01

For Current Prices see Page 9

Acetic Acid—Production of synthetic acetic acid amounted to 52,006,197 pounds during January of this year, the Tariff Commission reported. The commission issued no figure representing natural output during the same month, either in order to avoid disclosure of confidential data of individual companies or because available data were considered insufficient to represent total output.

In the month previous, 48,153,114 pounds of synthetic and 1,584,000 pounds of natural acid were produced, a total of 49,737,114 pounds of acid. Production during January, 1956, included 47,763,109 pounds synthetic and 1,856,000 pounds natural, a total of 49,619,109 pounds of acid.

The commission's revised, preliminary figure for total output of synthetic material in 1956 was 531,569,413 pounds. No corresponding figure for production of natural acid has been published.

Acetone—What with substantial additional output coming onto the market from new cumene process facilities, producers of methyl methacrylate and other consumers of acetone were finding abundant material available. Demand has been steady in fairly heavy volume. Prices, long unchanged, were regarded as firm and stable.

Production amounted to 55,149,652 pounds during January of this year, the Tariff Commission reported, compared to output of 54,708,379 pounds in the month previous and production of only 49,009,484 pounds in January, 1956. The commission's revised, preliminary figure representing aggregate production of acetone during 1956 was 609,604,502 pounds.

Butadiene—Demand continued strong, and trade was carried ont in heavy volume. Supplies were generally abundant, and consumers were experiencing no difficulty in obtaining sufficient material to meet heavy commitments on end products. Substantial new plant capacity was coming into the market, and trade sources anticipated no shortages at least during the balance of the current calendar year.

Contract prices ranged from 14½c. to 15c. per pound. This market was rapidly coming into equilibrium, however, and more stable market conditions were forecast for the months ahead.

While consumption of rubber for tire manufacture has been somewhat disappointing so far this year, activity in other consuming channels has been notably strong.

Both world output and world consumption of synthetic rubber established new highs in 1956, the Commerce Department reported. Production was 1,210,000 tons last year, compared to the previous high for one year, established in 1955, of 1,085,266 tons. The previous high in consumption, also recorded in 1955, of 1,062,500 tons, was topped by the 1956 total of 1,135,000 tons.

World consumption of natural rubber amounted to 1,885,000 tons in 1956, another record for one year. The previous high, established in 1955, was 1,870,000 tons.

In the United States, however, total output of natural plus synthetic rubber during 1956 was off about 5.8 percent as compared to that during the year previous.

Carbon Tetrachloride—Preference for aerosol sprays continued to provide firm support for this market, though, in keeping with the general tone of business, trade was a bit more quiet than it had been a few months ago.

The Tariff Commission put production during January, 1957, at 24,937,307 pounds, off appreciably from the 27,196,644 pounds reported produced in the month previous. Some 26,493,697 pounds was turned out in January, 1956. The commission's revised, preliminary figure for total production of carbon tet during 1956 was 305,319,113 pounds.

Dipentaerythritol—This material was, as always, extremely tight. Some consumers indicated a preference for dipentaerythritol over pentaerythritol. Since it was economically feasible to produce dipenta only as a byproduct of PE production, and since the byproduct yield is very small relative to the quantity of PE produced, the dipenta has always been far short of demand for it.

Ethylene Glycol—Production during January of this year amounted to 93,089,344 pounds, the Tariff Commission noted, off somewhat from the 95,180,611 pounds reported produced during the previous month but still well ahead of the 90,684,121 pounds turned out in January, 1956. The commission's revised, preliminary figure standing for total output during 1956 was 1,027,090,699 pounds.

2-Ethylhexoic Acid—Delivered prices in the east last week were 34½c. per pound

Aliphatic Organics

in tanklots, 37c. per pound in carlots and truck loads, 38c. per pound in smaller drumlots, 43c. per pound in 5-gallon containers, 58c. per pound in one-gallon containers and 79c. per pound in 8-ounce containers. Prices were 1c. per pound higher west of the Rockies.

Formaldehyde — Phenolics and urea-formaldehyde resins were sustaining steady trade at moderate volume. Business slowed down a bit some months ago, then, apparently, leveled out on a new plateau.

Tariff Commission reported output during January of this year was 109,149,087 pounds on the basis of 37 percent formaldehyde content, compared to output of 107,918,168 pounds in the month previous and 111,690,765 pounds during January, 1956. The commission's preliminary figures representing total production for calendar years were 1,353,698,744 pounds (a substantial revision of the sum of the twelve monthly figures published) in 1956 and 1,195,459,108 pounds in 1955.

Molasses—The minimum price for which blackstrap molasses was sold at New Orleans declined ½c. per gallon during the week ended last Tuesday, Agricultural Marketing Service reported. The range was now 24c. to 25c. per gallon, with most transactions posted at 24½c. per gallon, ¼c. per gallon lower than the most commonly reported price during the week previous.

Through the south and middle west the situation was generally unchanged, with buyers remaining on the sidelines waiting to see just how long the current downward trend of prices would prevail. Sales were confined almost entirely to volume sufficient to cover immediate requirements. At New Orleans, demand continued slow, with supply still adequate.

The New York price continued unchanged at 28c. per gallon, with demand moderate and supply adequate.

In general through the east and far west, prices were unchanged, demand was moderate and supply was adequate.

As of March 31, production of blackstrap from the 1957 Cuban sugar crop added up to 159.2 gallons, the yield per short ton of raw sugar coming to 39.2 gallons. As of the same date a year ago, production amounted to 145.3 million gallons with a yield of 39.6 gallons per short ton of raw sugar.

Five Cuban mills had completed grinding operations by March 31 of this year.

A report issued March 31 by Cuban Sugar Stabilization Institute said that 102 million gallons of blackstrap from the 1957 crop had been sold for export, or 8 million gallons less than the figure previously reported. Of the amount earmarked for export, 20.4 million gallons had been shipped out by March 31.

Of 130.4 million gallons of blackstrap allocated for Cuban domestic use, 40.6 million gallons had been sold, including 27.5 million gallons intended for use in production of absolute alcohol and 13.1 million gallons intended for other domestic uses.

Sales of Puerto Rican blackstrap during the week ended April 12 amounted to 787,356 gallons.

Oxalic Acid—The Tariff Commission reported that production of oxalic acid during January, 1957, added up to 1,777,897 pounds. Either in order to avoid disclosure of individual company data regarded as confidential or because available data were considered insufficient to represent total production, no corresponding figure has been published for December, 1956. Output during January, 1956, was 2,121,770 pounds.

The commission's revised, preliminary figure on production of this acid during calendar year 1956 was 20,767,368 pounds.

Perchloroethylene—Production of this material (otherwise tetrachloroethylene) amounted to 15,879,228 pounds during January of this year, the Tariff Commission reported. Corresponding figures for production were 15,963,820 pounds during the month previous and 17,000,495 pounds during January, 1956. The commision's revised, preliminary figure on total output of perchloroethylene during calendar year 1956 was 183,290,333 pounds.

In common with other solvents closely geared to the general level of business activity, perchloroethylene has been moving a bit more slowly during the last three or four months. Volume of trade remained fairly substantial, however, and trade sources reported that demand for this material for use as a metal degreasing agent was holding up rather well.

Propylene Glycol—The Tariff Commission's revised, preliminary figure representing total production of propylene glycol during 1956 was 81,385,303 pounds. As in most months in 1956, the commission published no data for output during January of this year, either in order to avoid disclosure of confidential data of individual companies or because available statistics were not regarded as representative of total output. Production was reported as 6,596,648 pounds in December, 1956, and 5,921,545 pounds during January, 1956.

Trichloroethylene — Demand for trichloroethylene for use in metal degreasing operations continued fairly strong, trade sources reported. Volume of business remained substantial, it was said, but the market was not as active as it had been several months ago.

Production during January of this year amounted to 23,994,251 pounds, the Tariff Commission reported, compared to output of 25,254,934 pounds in the month previous and 29,474,470 pounds during January, 1956. The commission's revised, preliminary figure for total output during calendar year 1956 was 319,853,912 pounds.

THE KEY TO HARCHEM SEBACIC HEAT AND LIGHT STABILITY

SEBACIC ACID is a PURE Chemical

Harchem Sebacic Acid is suitable for your most exacting developments and provides outstanding

HIGH TEMPERATURE STABILITY • BUILT-IN FLEXIBILITY
MAXIMUM LIGHT RESISTANCE

so essential to Alkyds, Polyesters, Polyamides, Plasticizers and Synthetic Lubricants.

H-13

HARCHEM DIVISION
WALLACE & TIERNAN INC.
25 MAIN STREET BELLEVILLE 9 N. J.
IN CANADA W. C. Hardesty Co. of Canada Ltd., Toronto

MATHIESON

GLYCOL ETHER SOLVENTS

significant facts to know

purity
that meets rigid specifications.

versatility
that may well prove the key to more effective, more economical manufacturing.

technical service
that's your assurance you use Poly-Solv's to best advantage.

will one or more of these solvents improve your process?

	Poly-Solv EM ethylene glycol monomethyl ether	Poly-Solv EE ethylene glycol monoethyl ether	Poly-Solv EB ethylene glycol monobutyl ether	Poly-Solv DM diethylene glycol monomethyl ether	Poly-Solv DE diethylene glycol monoethyl ether	Poly-Solv DB diethylene glycol monobutyl ether
Boiling point at 760 mm— °C	124.5	135.1	171.2	194.2	201.9	230.4
Flash point (open cup) °F	115	130	165	200	205	240
Vapor pressure, 20°C	6.2	3.8	0.6	0.2	0.1	0.02
Viscosity (absolute) 20°C—cp	1.7	2.1	6.4	3.87	4.5	6.49

Mathieson Poly-Solv's are completely soluble in water at 20°C; have a color APHA of 15 maximum; are shipped in 4,000, 6,000, 8,000-gallon and compartmented tank cars as well as in 55-gallon resin-lined drums.

Poly-Solv® is a trademark

For data sheets and other important information, get in touch with your Olin Mathieson representative.

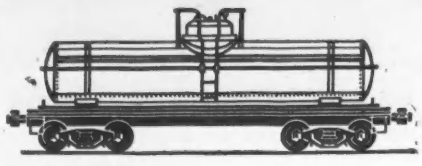
MATHIESON CHEMICALS
OLIN MATHIESON CHEMICAL CORPORATION
INDUSTRIAL CHEMICALS DIVISION • BALTIMORE 3, MD.

4725

MATHIESON

INORGANICS: Ammonia • Bicarbonate of Soda • Carbon Dioxide • Caustic Potash • Caustic Soda • Chlorine • Hydrazine and Derivatives • Hypochlorite Products • Muriatic Acid • Nitrate of Soda • Nitric Acid • Soda Ash • Sodium Chlorite Products • Sulfate of Alumina • Sulfur (Processed) • Sulfuric Acid
ORGANICS: Ethylene Oxide • Ethylene Glycols • Polyethylene Glycols • Glycol Ether Solvents • Ethylene Dichloride • Dichloroethylether • Formaldehyde • Methanol Sodium Methylate • Hexamine • Ethylene Diamine • Polyamines • Ethanolamines • Trichlorophenol • Surfactants

Now available in tank cars...



ACETONITRILE $CH_3C{\equiv}N$

VERSATILE SOLVENT for coatings . . . synthetic fibers . . . fats and oils processing.

REACTIVE INTERMEDIATE for pharmaceuticals and other chemicals.

On hydrolysis acetonitrile yields acetic acid. Internally, the quantitative toxicity of acetonitrile is comparable to acetic acid. Externally, it is no more irritating than acetone. For detailed information on solvent properties and chemical reactivity, call or write the nearest of CARBIDE'S 23 offices.

CARBIDE AND CARBON CHEMICALS COMPANY
A Division of Union Carbide and Carbon Corporation
UCC

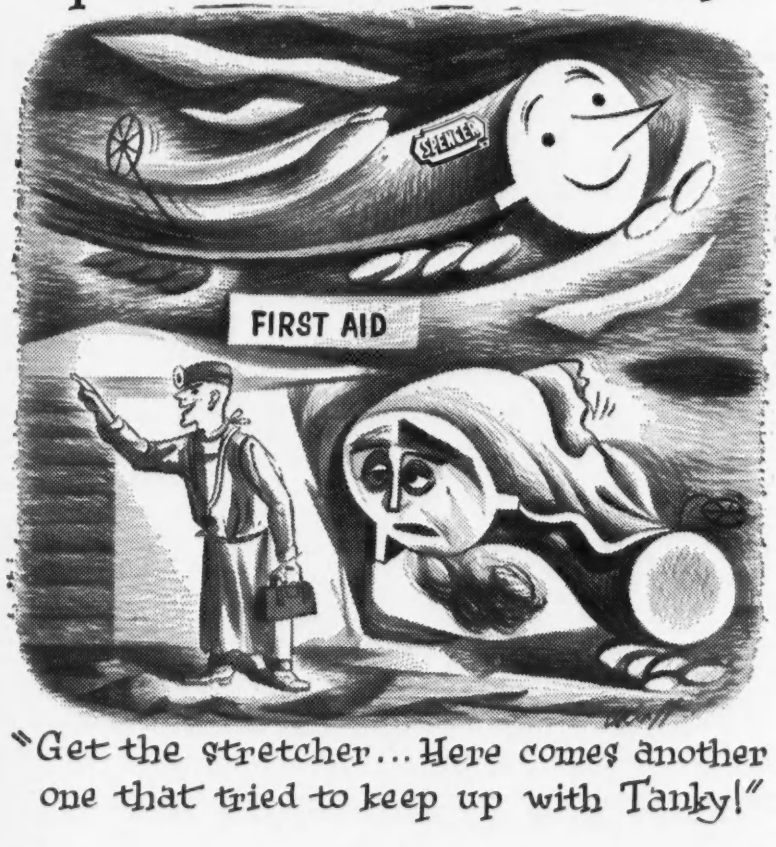
30 E. 42nd St., New York 17, N. Y. Offices in Principal Cities
In Canada: Union Carbide Canada Limited, Toronto

Evaporate **ETHYL ALCOHOL** into the atmosphere?

If so, investigate the savings possibilities of a B-C Solvent Recovery System. Ask for Bulletin No. W-18.

BARNEBEY-CHENEY COLUMBUS 19, OHIO

Spencer Service is Wonderful



"Get the stretcher... Here comes another one that tried to keep up with Tanky!"

SPENCER

America's Growing Name in Chemicals

SPENCER PRODUCTS: "Poly-Eth" Polyethylene • Ammonia (Commercial and Refrigeration Grade) • Aqua Ammonia • 83% Ammonium Nitrate Solution • Synthetic Methanol • Formaldehyde • Hexamine • "Mr. N" Ammonium Nitrate Fertilizer • SPENSOL (Spencer Nitrogen Solutions) • FREZALL (Spencer Dry Ice) • Liquid CO_2 • Cylinder Ammonia • Nitric Acid

Spencer Chemical Company, Dwight Bldg., Kansas City 5, Mo.
Works: Pittsburg, Kas. Henderson, Ky. · Chicago, Ill. · Vicksburg, Miss. · Orange, Texas

Agriculture Research Increase Is Seen

—Continued from page 3

and uses of agricultural products is an absolute necessity.

Technology Outpacing Population Rise

While the anticipated continuing rise in population presents an impressive number of new mouths to feed each year, it was pointed out, the momentum of improved agricultural technics appears certain to outpace the population increase for at least until 1965, and probably for a much longer period.

"The commission has investigated the possibilities for practical expansion of industrial utilization in every major phase of agricultural output," the report continued. "It declares its conviction that the aggregate results from the programs recommended will provide important and enduring added markets for farm products. It foresees not only that profitable additional markets for agriculture can be created, but that industry can gain new areas of activity, labor will find new employment opportunities, and consumers will enjoy more and better products."

The report noted that research in agriculture has not kept pace with other research and as a result inroads have been made on agricultural fields that only a few years ago were regarded as natural monopolies of certain crops. Some of the examples cited were: soap was made from agricultural oils and fats; adhesives came from starch, glue and plant gum; shoes and traveling bags were made almost wholly from leather; paints were made from vegetable oils; alcohol from molasses and corn.

"But this condition was not to last," the report said. "In the past twenty-five years agriculture often has been researched right out of its own natural domains. Industry will continue to explore the unknown in search of new products and new uses for old products. Nothing is plainer in the economic pattern of today than that agriculture must compete in the areas of basic and applied scientific research. Agriculture should be able to compete as an equal in the contest for consumer acceptance. It is now losing by default."

Research Lines Presented

The report contained a number of possible lines of research out of many suggested in the reports of the task force groups that had been assigned various topics for study. Some of the suggested lines were:—

• To increase the use of materials from cereal grains in the manufacture of paper and paper products. The research required would include, among other steps, development of methods for transforming starch into water-resistant fibrous products and incorporating them in paper; chemical methods of linking the starch to wood cellulose; physical and chemical modification of starch, flour, and protein to produce superior coating materials and laminating and corrugating adhesives.

• To develop new and expand existing industrial uses of wheat gluten. The gluten has unique properties that make it exceptionally suitable for a number of rather large-scale uses that might be developed by research, including:—adhesive, coating, and sizing materials for the paper and textile industries; hormone-type weed-killers which might be produced from the amino acids that make up the gluten; improved insecticides, fungicides, and sequestering agents; as modifiers to improve certain properties of phenolic and urea resins.

• To incorporate grain or grain products in structural materials; to make greater use of starch, protein, and oil from cereal grains as raw materials for the production of plastics and plasticizers; to expand the use of grain products as sources of important chemical agents used for oil drilling and petroleum processing operations; to increase the use of starch and other grain products for the production of surfactants and antioxidants.

Other Avenues of Research

A great number of other avenues of research were cited in the fields of cotton, oilseeds, meat and animal byproducts, tobacco, wool and mohair, dairy products, sugar, forage crops, fruits and vegetables and edible tree nuts as sources of medicinal products, white potatoes, poultry and eggs, crop residues, and forestry products.

Although the compulsory use of grain alcohol as an additive for motor fuels has been widely heralded in farm circles as a sure cure for the burdensome surplus grain problem, the commission was unable to find any encouragement for believing that, in the present state of knowledge and under current economic conditions, the use of industrial alcohol for motor fuel can be justified.

"It appears clear that the cost to the public would far outweigh the possible advantages," the commission said. After going deeply into the facts of the situation, the commission cited the following outstanding conditions that must be recognized:—

• "No blend of less than 10 percent would be practical or effective.

• "A 10 percent blend of industrial alcohol would require in excess of two billion bushels annually which is more than the current surpluses of cereal grains.

• "Plant capacity for processing this quantity of grain would cost in the neighborhood of $2 billion and would have to be built with government funds.

• "The total cost to the public through the increase in the price of motor fuel would be in excess of $1 billion annually.

"In view of these facts," the report said, "the present state of scientific knowledge and the costs involved, the commission finds it impracticable to recommend an alcohol motor fuel program."

ETHYLENE IMINE

now available in **two grades**

high purity —b.p. range 55°-57°C.
technically pure—b.p. range 54°-61°C.

•

CHEMIRAD CORPORATION
P.O. Box 152, Port Washington, L. I., N. Y.
Phone: Port Washington 7-1341

ETHYLENE GLYCOL ANTI FREEZE TYPE

METHANOL 99.85% PURE VIRGIN MATERIAL

ACME REFINING CORPORATION
12-34 LISTER AVE., NEWARK, N. J. Tel.: MArket 3-4670

HEXAMETHYLENE TETRAMINE

DEHYDROACETIC ACID

Manufactured by:

FARBENFABRIKEN BAYER AG., Leverkusen, Western Germany

NAFTONE INC.

515 Madison Avenue
New York 22, N. Y.
Tel. PLaza 3-1820

San Francisco office:
383 Brannan Street
Tel. GArfield 1-4130

Petroleum Derivatives

Cleaner's naphtha continued to move in heavy volume against contract commitments last week, but now that the Easter holiday is over, conditions are expected to return to normal. This seasonal jump in naphtha sales, although mainly a result of the holiday, is also attributable to the change to Spring weather. The pace of steel production declined further last week to about 90 percent of rated capacity ,as compared with 98 percent at the start of the year. This is of some interest to petroleum producers because of the corresponding decrease in cokeoven output of aromatic solvents. If cokeoven supply of toluene improves, petroleum makers might be in a position to put into the solvent market some of the toluene now going into high octane gasoline, producers point out.

The American Petroleum Institute has reported total output of liquefied petroleum gases at 317,800,000 gallons for the two-week period ended March 31. This compares with 284,416,000 gallons produced during the previous period. Inventories on March 31 showed an increase to 482,586,000 gallons from the 433,381,000 gallons held on March 15. A breakdown of these figures in respect to individual gases is provided below under "Lighter Fractions."

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
107.65	107.65	107.65	104.37

For Current Prices see Page 9

Solvents and Diluents

Benzene—January production of petroleum benzene has been reported by the Tariff Commission at 9,648,931 gallons, a slight decline from the 9,941,257 gallons reported for December. Cokeoven output showed a greater decline, totaling 19,940,211 gallons in January, as compared with 21,431,154 gallons the previous month. Observers are assuming that cokeoven producton figures for February and March will show a further drop of about 8 percent, as that has been the extent of the downturn in steel production since the first of the year. On the basis of a steady demand level, this decline in production could be expected to stimulate increased output of petroleum benzene. However, producers are taking into consideration the fact that consumption of benzene during the closing months of last year was abnormally high. The current pace of consuming demand is rated about normal.

Cleaner's Naphtha—Naphtha is moving in heavy volume to a seasonal market. This time of the year, marked by the beginning of warm weather and the advent of the Easter holiday, always brings on a rash of brisk buying by dry-cleaning establishments. Reports from naphtha producers indicate that supplies are sufficient to take care of the current rush.

Mineral Spirits—All shipping points have maintained the 1c. per gallon price increase that was posted last January to offset higher crude oil quotations. A seasonally moderate business volume is reported, with ample supplies available for industry needs.

Partial Aromatics — These aliphatics were also advanced in January and have held uniformly steady at the higher quotations. A normal supply level is encountering moderate demand.

Toluene—Toluene production during the month of January amounted to 19,567,672 gallons, as compared with December output of 17,452,116 gallons, according to a report issued by the Tariff Commission. Of the January total, 16,241,704 gallons were supplied by petroleum and other sources, while cokeoven operators contributed 3,325,968 gallons. The December breakdown shows 3,487,373 gallons of cokeoven output, and 13,964,743 gallons from other sources.

Cokeoven supply of toluene was about 15 percent higher at the end of February than it was a year earlier, according to Tariff Commission data reported in this publication last week. Sources in the trade consider this to be a result of the near-capacity pace of steel production that followed the brief strike in the industry. But with steel output now running about 8 percent lower than at the start of the year, producers have good reason to expect a healthier supply position to ensue. Thus, petroleum makers would be in a position to put into the solvent market some of the toluene now going into high octane gasolene.

Xylene—The Tariff Commission has reported January output of xylene at 19,567,672 gallons, as compared with 17,542,116 gallons in December. The December figure brought the year's output to 176,581,009 gallons.

Preliminary sales reports for the first quarter of the year indicate that the xylene market is about holding its own, with some areas running under the record pace that was scored last year. Supplies are adequate at all shipping points.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended March 30 totaled 252,309,000 barrels, according to data reported to the Bureau of Mines. Compared with the revised total of 253,242,000 barrels of the preceding week, this represents a decrease of 933,000 barrels, comprising a decrease of 1,581,000 barrels in stocks of domestic crude and an increase of 648,000 barrels in stocks of foreign crude.

Lighter Fractions

Output of all liquefied petroleum gases (including butane, propane, isobutane and mixtures) from March 16 to March 31 reached 317,800,000 gallons, as compared with 284,416,000 gallons in the previous two-week period, the American Petroleum Institute has reported. March 31 inventories increased to 482,586,000 gallons from 433,381,000 gallons on March 15, the Institute noted.

Butane—According to the American Petroleum Institute, output of butane in the period March 15 to March 31 totaled 80,908,000 gallons. This compares with the total of 63,668,000 gallons reported for the previous two-week period. Inventories at plants, terminals and underground on March 31 stood at 205,685,000 gallons, advancing substantially from the 178,240,000 gallons held on March 15. These figures are reported on a Bureau of Mines basis.

Isobutane—Output of this material during the period March 15 to March 31 was reported at 19,912,000 gallons. In the previous period production had totaled 18,121,000 gallons. Investories on March 31 aggregated 20,584,000 gallons, as against 20,024,000 gallons on March 15.

Propane—Production during the two weeks ending March 31 totaled 145,102,000 gallons, as reported by the A. P. I. During the previous two weeks, production was 138,243,000 gallons. Inventories on March 31 showed an increase, totaling 238,626,000 gallons, as compared with 218,730,000 gallons on March 15.

Miscellaneous

Crude Oil—Current reports of the industry for the week ended March 29, 1957, indicate a decrease in crude-oil production and an increase in crude runs. According to the American Petroleum Institute, the daily average output of crude (including lease condensate) was 7,786,000 barrels, a decrease of 32,000 barrels from the preceding week. Daily average crude runs to stills of 8,099,000 barrels were 123,000 barrels above the preceding week, and 405,000 barrels above the week ended March 30, 1956. Runs of foreign crude amounted to 792,000 barrels daily, compared with 758,000 barrels in the preceding week. For the four-week period ending March 29 crude oil production averaged 7,804,000 barrels daily and crude runs to stills averaged 8,062,000 barrels daily with runs of foreign crude averaging 780,000 barrels daily.

Ad run by Pennsylvania Refining Company's Japanese representative

IN ANY LANGUAGE, PENN-DRAKE® STANDS FOR HIGH STABILITY WHITE OILS.

HELP SAVE ONE FRIEND FROM CANCER

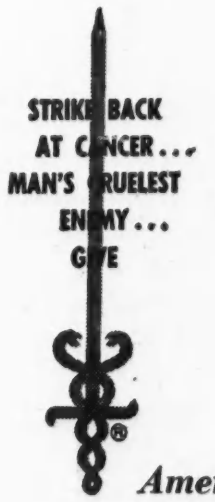
Tens of thousands with cancer will lose their lives needlessly this year. They could have been cured by early diagnosis and prompt treatment.

Will one of these unfortunate victims be a friend of yours? It could happen. We know that cancer strikes one in four.

There's a way to help that friend, and thousands of others. That's by helping the American Cancer Society spread its educational message as widely as possible.

Money you contribute improves services to patients, arms everyone with protective information about cancer, and pays for research to conquer this cruelest of diseases.

When you give your dollars to the American Cancer Society, you are making an investment that pays off in the saving of human lives. Perhaps the life of one friend. Perhaps your own life.



American Cancer Society

GENTLEMEN:

I want to help conquer Cancer.

( ) Please send me free information about Cancer.

( ) Enclosed is my contribution of $_____ to the Cancer Crusade.

Name_____

Address_____

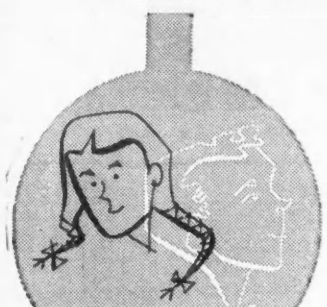
City_____ Zone____ State_____

(MAIL TO: CANCER, c/o your town's Postmaster)

Announcing

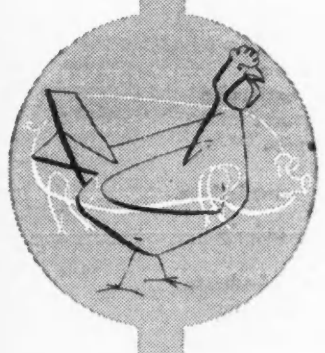
a new source of supply for

NIACIN



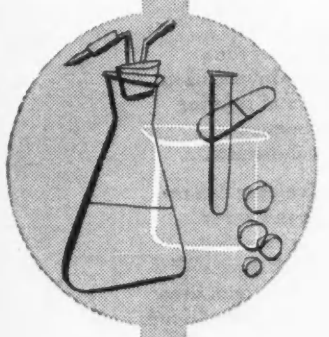
for HUMAN NUTRITION

Koppers Niacin meets, or exceeds, all U.S.P. specifications for niacin to be used as a dietary supplement in baked goods, cereals, and all-grain products.



for ANIMAL NUTRITION

Koppers 50% or 80% Feed-Grade Niacin is specially compounded from the U.S.P.-grade product to give a feed supplement that has uniformly high quality and smooth, even consistency.



for PHARMACEUTICALS

Koppers U.S.P. Niacin is produced by an improved process that eliminates the possibility of catalyst contamination, since no catalyst is used. The uniformly white, pure product is ideal for pharmaceutical use.

For full information on Koppers Niacin, write for our illustrated brochure giving specifications and information on availability. Address your request to Koppers Company, Inc., Tar Products Division, Room 120G, Koppers Building, Pittsburgh 19, Pa.

KOPPERS

KOPPERS

COAL CHEMICALS

Coal Chemicals

H acid was reduced 10 cents per pound in carlots last week effective immediately. At the same time, the price in less carlots and less truck loads was reduced 2 cents per pound. A move initiated early this month to advance quotations for dodecylbenzene ½ cent per pound across the board had by now become industrywide. It was noted that the rapid growth in demand for detergents, chief outlet for dodecylbenzene, had leveled off some time during 1956 and that, since then, the ratio of sales of soap versus detergents has remained fairly steady. Otherwise, the price pattern remained unchanged last week, with activity reported generally slow.

Benzene and toluene, moving with extraordinary vigor only four months ago, were fairly slow last week. Toluene was soft. Naphthalene and creosote remained in a weak market position.

The acids were in fairly good balance. Phthalic anhydride continued dull.

Importers noted quickened interest here in anthracene, methyl naphthalene, a-picoline and quinolidine from foreign sources.

Imports of iron ore amounted to 34 million net tons in 1956, American Iron and Steel Institute reported, compared to 26.3 million net tons imported in the year previous. The figure has increased each year with one exception since 1946, when imports added up to only 3.1 million net tons.

August of last year was the record month, with imports of 4.5 million net tons. In each of four other months in 1956 imports exceeded those brought in during the entire year 1946.

Imports last year included 15.4 million net tons from Canada, 10.4 million net tons from Venezuela, 2.0 million net tons from Peru and more than one million net tons each from Brazil, Chile, Liberia and Sweden.

The institute reported that steel production here in the first two months of 1957 exceeded that for the like period in any previous year. The aggregate was 20,995,762 net tons, about 48,000 tons more than output during January and February in 1955.

The institute estimated that steel production in the week ended April 21 would amount to 89.7 percent of theoretical capacity, equivalent to 2,297,000 net tons, less than the output recorded in any previous week since the cokeovens were fully restored to operation last August following the steel strike. Steel production was 2,310,000 net tons in the week previous, 2,392,000 net tons in the comparable week one month ago and 2,466,000 net tons in the corresponding week one year ago.

Price Trends

Advanced

None

Reduced

H acid, 10c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
118.19	118.20	118.32	115.01

For Current Prices See Page 9

Basic Products

Benzene—Business continued uncommonly dull last week, producers reported, and only the considerable reserve strength that this market possessed four months ago was preventing a buildup of inventories at producers' plants. As it was, only moderate stocks had accumulated at this time.

Several additions to petroleum production facilities have come into the picture in the last year. Cokeoven output, on the other hand, was off about 8 percent over the past four months due to the decline in steel production. Supplies were generally ample.

Imports have been reduced substantially during the last three or four months. Trade sources said these would probably be somewhat higher during the coming summer but that the total volume of foreign benzene brought in here during 1957 would be notably less than the 66 million gallons brought in during 1956. In fact, it was the consensus that the 1956 figure for imports would not again be reached.

Benzene prices were firm at quotations of long standing, and no change was anticipated for the next several months at least.

Coaltar—Some 32,321,664 gallons of coaltar recovered from cokeoven operations was sold during February, the Bureau of Mines reported, compared to sale of 31,049,741 gallons of the same material in February, 1956. Aggregate sales for the first two calendar months were 68,618,312 gallons this year and 62,172,699 gallons last year.

Stocks at producers' plants were 35,958,574 gallons at the end of February, 1957. They were 39,537,421 gallons at the end of February, 1956. The stocks figure for the more recent date represents an increase, however, over the 34,043,885 gallons reported on hand at producers' plants as of the beginning of February, 1957.

Naphthalene—Bureau of Mines reported that cokeoven producers' stocks of crude naphthalene aggregated 39,291,256 pounds as of the end of February of this year, almost ten times the 4,135,175 pounds on hand at producers' plants one year earlier. Producers' stocks were 38,774,016 pounds at the end of January of this year.

Stocks at the end of February of this year included 36,392,442 pounds solidifying at 76°C and under 79°C, 482,724 pounds solidifying at 74°C and under 76°C and 2,416,090 pounds solidifying under 74°C.

Meanwhile, sales have fallen off sharply. They were only 11,219,521 pounds in February, 1957, compared to 15,696,157 pounds in February a year ago; 21,152,055 pounds in the first two months of this year, compared to 30,804,652 pounds in the like period in 1956.

Sales in February, 1957, included 7,647,089 pounds solidifying at 76°C and under 79°C, 602,369 pounds solidifying at 74°C and under 76°C and 2,970,063 pounds solidifying under 74°C.

Even this unsatisfactory situation might deteriorate rapidly, dealers noted, should the Russians begin dumping their naphthalene stocks in Europe. These sources reported that the Russians were sitting on something like 44 million pounds of this material. Sooner or later, it was believed, this surplus would have to be moved somewhere, whatever prices it might bring

Solvent Naphtha—Sales of refined light solvent from cokeoven operations in Feb-

Cokeoven Output: February

Following are cokeoven production statistics comparing February, 1957, with the same month a year ago and cumulative calendar year totals through February of this year and last, as reported by the Bureau of Mines. Only cokeoven output is represented.

	February 1957	*February 1956*	*First Two Months 1957*	*First Two Months 1956*
Benzene (excluding motor grade).....gals.	15,488,824	16,019,081	32,182,019	32,285,363
Coaltar, crude .....gals.	69,504,268	70,925,702	146,713,799	148,318,541
Creosote oil:				
Creosote-coal tar solution .....gals.	369,376	433,818	804,175	596,044
Content in solution .....gals.	300,763	350,855	654,434	480,999
100 percent straight distillate .....gals.	1,645,028	1,790,845	2,198,687	3,361,048
Total 100 percent creosote .....gals.	1,945,791	2,141,740	2,853,121	3,842,047
Naphthalene, crude:				
Solidifying under 74° C.....lbs.	2,976,541	3,013,712	6,439,913	6,435,572
At 74° C and under 76°C.....lbs.	1,048,252	705,983	2,716,912	1,473,146
At 76° C and under 79° C.....lbs.	8,679,225	12,345,560	19,800,339	23,854,226
Total .....lbs.	12,704,018	16,065,255	28,957,164	31,762,944
Solvent naphtha, refined .....gals.	29,480	25,360	42,190	33,345
Toluene .....gals.	3,170,104	3,235,857	6,496,072	6,600,968
Xylene .....gals.	857,569	854,191	1,795,455	1,805,603

Coal Chemicals

ruary of this year amounted to 18,998 gallons, the Bureau of Mines reported, compared to sales of 18,976 gallons in the month previous and 17,756 gallons in February, 1956. Aggregate figures for January plus February were 37,974 gallons this year and 18,757 gallons in 1956.

Producers' stocks of refined material at cokeoven plants added up to 53,643 gallons as of the end of February of this year, 43,161 gallons as of the end of the previous month and 64,446 gallons as of the end of February, 1956.

Sales of crude heavy solvent from cokeoven sources amounted to 414,547 gallons in February of this year, 553,692 gallons during the month previous and 479,979 gallons during February, 1956. Aggregate sales of this material during the first two calendar months were 968,239 gallons in the current year and 889,985 gallons in 1956.

Producers' stocks of crude solvent at cokeoven plants were 305,522 gallons as of the end of February of this year, 286,014 gallons at the end of the previous month and 285,389 gallons as of the end of February, 1956.

Toluene—Trade was reported very slow last week. Despite a moderate decline in cokeoven output concurrent with reduced steel production, the balance of this market had by now become as awkward as it was prior to the steel strike of last summer. Inventories were heavy, and only the strong demand for high-octane fuel was keeping them from growing even more burdensome. Government demand for toluene for manufacture of explosives was poor, as it had been for the past two years, and general business activity was offering less support than it did a few months ago.

Xylene—Producers found business quite slow last week. Availability of xylene has eased notably in the last four months. There was plenty of reserve strength here, however, and no one was complaining yet about an inventory problem. Prices stood firm.

Intermediates

Anthracene—Imported material was attracting a rather lively trade here of late. The effect has been a relatively weak market for domestic material, a situation which has obtained for years now.

Di-o-Tolylguanidine — Prices of long standing were unchanged on new price lists effective in second quarter 1957. They were 62c. per pound in ton lots and 63c. per pound in smaller lots in standard 100-pound drums, these quotations applicable east of the Rockies. Prices were 2c. per pound higher across the board west of the Rockies. Shipping terms were f.o.b. manufacturing point or warehouse, minimum transportation allowed to destination on orders of 100 pounds or more.

H Acid—Quotations on H acid in carlots were reduced 10c. per pound last week effective immediately. At the same time, a reduction of 2c. per pound was put into effect on purchases in less carlots and less truck loads.

The new prices were 90c. per pound for material in carlots and $1 per pound for acid bought in less carlots and less truck loads.

2-Mercaptobenzothiazole — New price lists effective in second quarter 1957 indicated no change in quotations of long standing for MBT, 42c. per pound in ton lots and 44c. per pound in smaller lots in standard 50-pound packages, bags or fiber drums. The foregoing schedule was in effect east of the Rockies, f.o.b. manufacturing point or warehouse, minimum transportation allowed to destination on orders of 100 pounds or more. Prices were 2c. per pound higher west of the Rockies.

2-Mercaptobenzothiazyl Disulfide—Prices of 52c. per pound in ton lots and 54c. per pound in smaller lots in standard 50-pound packages, bags or fiber drums, were continued in effect in new price schedules issued effective through second quarter 1957. These prices applied east of the Rockies, f.o.b. manufacturing point or warehouse, minimum transportation allowed to destination on orders of 100 pounds or more. Prices were 2c. per pound higher west of the Rockies.

Methyl Naphthalene—Importers noted a fairly lively interest in foreign methyl naphthalene last week at US ports.

Phthalic Anhydride—The market for phthalic continued dull last week. Volume of trade was substantial, but the steady growth of demand to which producers had become accustomed has been nowhere in evidence since the price was advanced last October 15. General business conditions characterized a cautious policy, with automobiles and hardgoods definitely off. Meantime, isophthalic acid has been showing up as a market influence, while the growth of European production capacity has trimmed the once heavy movement of phthalic anhydride into foreign markets. Supplies were generally ample here.

Dodecylbenzene—A move initiated to become effective early this month increasing prices of dodecylbenzene ½c. per pound across the board had become industrywide by last week.

The new schedule listed tanklots at 12½c. per pound, with drums, carlots, at 14½c. per pound and drums, less carlots, at 15½c. per pound, all quotations on a freight allowed basis.

Picolines—There has been increased activity in imported a-picoline recently, trade sources reported.

On the other hand, with requirements for drugs for treatment of tuberculosis on the heavy side abroad, gamma was still moving out of this country in fairly good volume.

Quinolidine—Dealers reported increased interest here recently in foreign quinolidine. Trade in imported material was maintained in fair volume, they said.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending April 21 was as follows:

Ammonia liquor	lbs.	893,400
Ammonium sulfate	lbs.	38,041,546
Benzene	gals.	3,400,684
Coaltar	gals.	16,715,225
Creosote	gals.	648,435
Naphthalene, crude	lbs.	3,616,829
Pyridine (2°C)	lbs.	12,969
Toluene	gals.	749,303
Xylene	gals.	216,145

TRIPHENYLPHOSPHINE
Available in research quantities
Write for data sheet, prices and listing of other research chemicals.
BEACON
Chemical Industries, Inc.
37 RICHDALE AVE., CAMBRIDGE 40, MASS

CRESYLIC ACID
DRUMS - CARLOADS
TANK WAGONS - TANK CARS
CONCORD CHEMICAL CO., INC.
Camden, New Jersey
WOodlawn 6-1526

Portrait of a Plant Manager worrying about deliveries of Pittsburgh Tar Acids

PHENOL
39°, 95%, 82-84%, 90-92%. Shipped in drums (approximately 470 lbs. net), tank trucks (4,000 gals.) and tank cars (4,000, 8,000, 10,000 gals.)

ORTHO CRESOL
25-28°C M.P. Shipped in tank cars (4,000, 8,000, 10,000 gals.), tank trucks (4,000 gals.) and drums (approximately 470 lbs. net).

META PARA CRESOL
3° and 12°. Shipped in tank cars (4,000, 8000, 10,000 gals.), tank trucks (4,000 gals.) and drums (approximately 470 lbs. net).

XYLENOL
Various grades available depending on use. Shipped in tank cars (4,000, 8,000, 10,000 gals.), tank trucks (4,000 gals.) and drums (approximately 470 lbs. net).

PLUS:
Phthalic Anhydride, Maleic Anhydride, Fumaric Acid, Benzene, Toluene, Xylene, Pyridine, Alpha Picoline, Beta Gamma Picoline, Sulphuric Acid, Oleum, Phthalocyanine (Blue and Green) and Pittsburgh PX Plasticizers.

TRADITIONALLY Pittsburgh quality . . . dependable Pittsburgh service . . . they're yours *automatically* when you order your tar acids from Pittsburgh Coke & Chemical. We welcome the opportunity to discuss your present and future tar acids need . . . and our unique ability as a basic producer to serve you efficiently. For prompt Pittsburgh Industrial Chemicals Service, call:

New York . . . OXford 7-9050
Pittsburgh . . . ATlantic 1-2290
Cleveland . . . CHerry 1-2170
Chicago . . . . CEntral 6-1760

INDUSTRIAL CHEMICALS DIVISION
PITTSBURGH COKE & CHEMICAL CO.
Grant Building • Pittsburgh 19, Pa.
WSW 6629

COAL CHEMICALS • PROTECTIVE COATINGS • PLASTICIZERS • ACTIVATED CARBON • COKE • CEMENT • PIG IRON

BENZYL CHLORIDES
(liquid - low melting solid)

BENZOYL CHLORIDES
(liquid)

BENZOIC ACIDS
(crystals - powder)

CHLOROBENZALDEHYDES
(liquid - solid - low melting solid)

CHLOROTOLUENES
(liquid)

Write for detailed information

HEYDEN NEWPORT

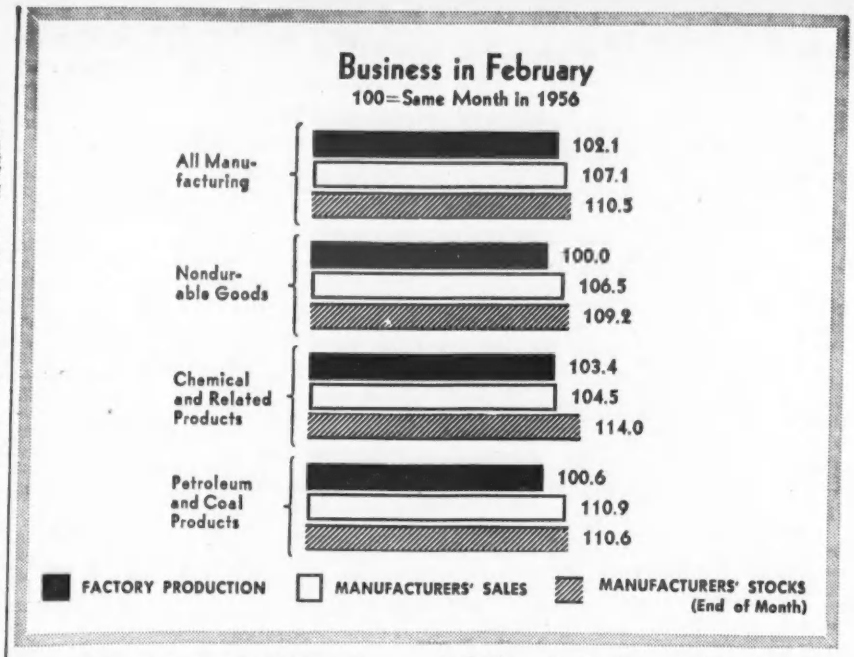
HEYDEN NEWPORT
CHEMICAL CORPORATION
342 Madison Avenue, New York 17, N. Y.

For fast service and top quality specify NEVILLE products

COUMARONE-INDENE RESINS
MODIFIED COUMARONE-INDENE RESINS
NONSTAINING RUBBER ANTIOXIDANTS
RUBBER RECLAIMING OILS
HI-FLASH SOLVENTS
HEAVY SOLVENTS
NEUTRAL OILS
WIRE ENAMEL THINNERS

NEVILLE CHEMICAL COMPANY • PITTSBURGH, PA.

NEVILLE



Republic Steel, Nat'l Lead Form Ore Treating Company

Republic Steel Corporation, Cleveland, Ohio, and National Lead Company, New York, have announced the formation of R-N Corporation. The new organization, owned jointly by the two companies, has developed a direct reduction process for the treatment of both low-grade and high-grade iron ores.

The process will provide the steel industry with high metallic iron feed materials for use in blast furnaces, electric, open hearth and cupola furnaces.

The R-N process was originally devised by National Lead Company in the course of research and development work on the separation of iron and titanium from titaniferous ores.

National Lead and Republic Steel have joined hands as a mutual development team to conduct research work on iron ores. A pilot plant, constructed in 1954 at Republic's Spaulding Mine near Birmingham, Ala., has been producing high metallic iron stock in quantities sufficient for commercial testing purposes.

Carbide Will Spend

—*Continued from page 7*

tion of polyethylene resins also are in process at Institute, W. Va., and Seadrift, Tex. The new units will use low-pressure processes.

Union Carbide Canada, Ltd., a subsidiary of the corporation, is completing a major addition to its Montreal chemicals plant which will provide capacity for production of 22 million pounds a year of polyethylene resins and compounds; approximately 49 million pounds of glycols; and 4 million pounds of ethylene oxide derivatives.

Another subsidiary, Union Carbide Caribe, Inc., is building a plant near Ponce, Puerto Rico, scheduled for completion next year, for the production of ethylene glycols.

Carbide's oxygen business also is growing at a fast rate. Included in the corporation's expansion program in this field are thirty new oxygen-producing plants and substantial additions to the capacity of existing facilities. The new plants are designed to produce oxygen automatically and continuously and to pipe it directly to the user's plant. The larger ones will produce argon also.

Most of Union Carbide's supply of ores used in making manganese alloys for steel manufacture have been coming from long distances. Recently, however, the Corporation has been developing manganese resources in this hemisphere. Extensive reserves acquired in South America are expected to contribute to the corporation's manganese requirements by 1960.

A further expansion of uranium milling facilities also is under way. This includes a new mill near Rifle, Colo., and ore concentrating plants at Slick Rock, Colo., and Green River, Utah, each having an input capacity of approximately 300 tons of crude ore daily.

Chemical Raw Materials

—*Continued from page 5*

of that nation's ores, which include columbite-tantalite, corundum, galena, manganese, ilmenite-rutile, mica, placer gold, and iron ore.

In the Greek pavilion are metallurgical materials in various stages of refinement, including: lead, zinc, pyrites, chromite, iron-nickel concentrates, manganese ore, bauxite, magnesite, bentonite, and silicon carbide.

Among spices displayed in the exhibit of Greece are chamomile flowers, laurel leaves, thyme leaves, oregano, and salvia.

The Mexican section graphically illustrates that country's production of lead, zinc, silver and copper during the past few years by means of wall graphs. Displayed are ingots of lead and zinc, and copper, manufactured at the smelters of American Smelting & Refining Company and Cobre de Mexico, S.A.

The name is
ALAN WOOD

WHEN YOU RE' UIRE

- Ammonium Sulphate
- Benzol
- To'uol
- Xylol
- Naphthalene
- Sodium Phenolate
- Tar Bases (Pyridine)
- Solvent Naphtha
- Crude Still Residue

OTHER PRODUCTS

Merchant Pig Iron
Magnetite Ore Concentrates
Foundry, Metallurgical and Industrial Coke

ALAN WOOD STEEL COMPANY
Coke and Chemicals Division
Conshohocken, Pa.

C·I·B·A
R Salt

New Technical Bulletin, Prices, etc. Now ready!

CIBA COMPANY INC.
627 Greenwich St., New York 14, N.Y.

Please send me CIBA Chemicals Handbook.

NAME_____
COMPANY_____ TITLE_____
ADDRESS_____
CITY_____ STATE_____

Pesticide Tolerance Rule Is Sought by Chemagro

Chemagro Corporation, New York, has asked the Food and Drug Administration to approve tolerances for residues of the pesticide chemical 0,0-dimethyl S-(4-oxo-1,2,3-benzotriazinyl-3-methyl) phosphorodithioate. The petition proposed tolerance residues of two parts per million for the chemical on certain fruit, and 0.5 part per million on cottonseed.

Brogdex Company, Pomona, Calif., filed a petition for a tolerance of 25 parts per million for residues of sodium dimethyldithiocarbamate in or on melons.

American Gilsonite Elects

Roy E. Nelson has been elected vice-president of American Gilsonite Company at a board of directors meeting held at company headquarters in Salt Lake City, Utah. In addition to his new appointment as an officer of the company, Mr. Nelson will continue as manager of production.

Dixon, Crayon Firm

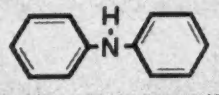
—Continued from page 4

and each company will operate as a separate entity. Together the companies represent 250 years of business activity in this country. The Dixon company was founded 129 years ago, and American Crayon, 121 years ago.

Most Dixon products are related to graphite. Besides its best known product, the "Ticonderoga" pencil, the company long has manufactured such graphite products as crucibles, refractories, lubricants, protective paints and other products with graphite ingredients. The company also manufactures powder metal components at its subsidiary, Dixon Sintaloy, Inc., Stamford, Conn.

American Crayon originated the manufacture of wax crayons and pioneered in the fields of chalks, artists' paints and educational art materials.

EAGER BEAVER!



DU PONT DIPHENYLAMINE (DPA)

DPA and its derivatives can work for you as:

- antioxidants
- anthelmintics
- stabilizers
- additives
- intermediates

Here's where:

- parasite control
- lubricating oils
- dyes
- plastics
- explosives
- antiknock compounds
- natural rubbers
- synthetic rubbers

Available in carload quantities, high-quality Du Pont DPA, the lowest-cost aromatic secondary amine, has a minimum freezing point of 52.5°C., boiling point of 302°C. For fact-filled booklet, contact our branch office nearest you (Boston, Chicago, Cleveland, Dallas, Los Angeles, New York and Charlotte, N.C.) or write: E. I. du Pont de Nemours & Co. (Inc.), Explosives Dept., Wilmington 98, Delaware.

EXPLOSIVES DEPARTMENT

Chemical Products

DU PONT

Better Things for Better Living ... through Chemistry

Data Offered

A bulletin entitled **The Relation of Silicon and Its Properties to the Electronics Industry** is available free of charge by writing to Aries Laboratories, Inc., 41 East 42nd street, New York. The monograph describes the characteristics of silicon in solar batteries, rectifiers, transistors and other equipment, and methods of device fabrication.

Evans Research & Development Corporation, New York, has published a new brochure, **Focus on Evans Research,** which is aimed at acquainting industry with the advantages of outside research. Copies may be obtained by writing to Evans, 250 East 42nd street, New York 17.

Scientific Glass Company, Bloomfield, N. J., has published **What's New for the Laboratory,** twenty-eighth in a series. The sixteen-page bulletin describes stainless steel vacuum and pressure filters, flexible heating tapes, and other items.

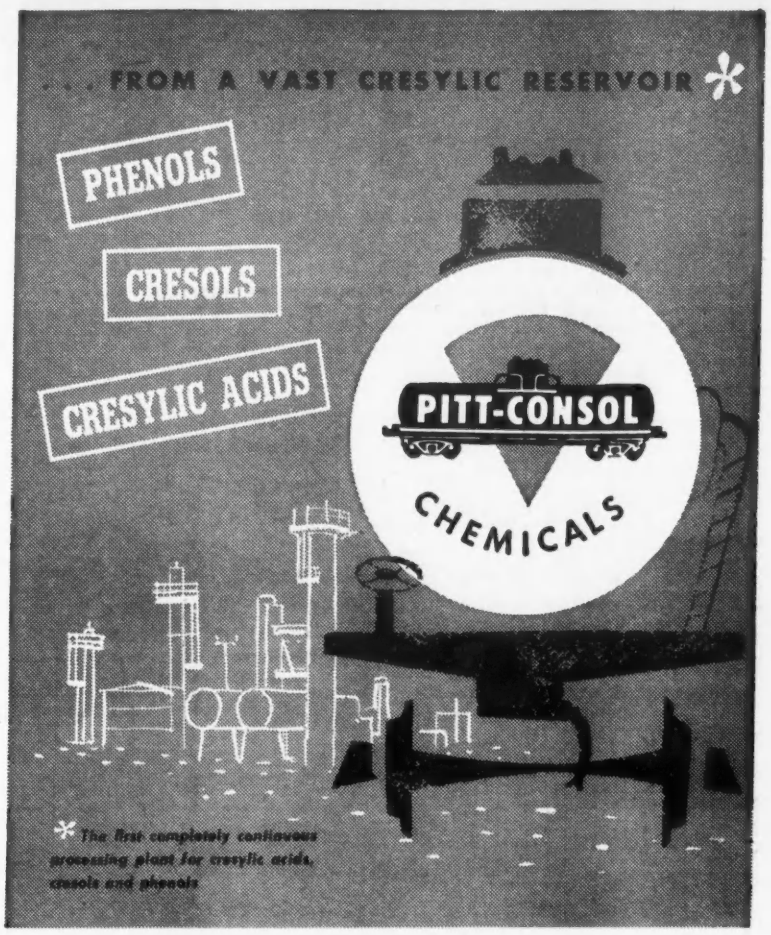
"Synthrapol PWS," a non-ionic surface active agent manufactured by Arnold, Hoffman & Co., Providence, R. I., is the subject of a technical bulletin by that name, which is available on request from the company.

The 1957 edition of the **Soybean Blue Book,** soybean industry year book, is now out, according to an announcement by George M. Strayer, executive vice-president of the American Soybean Association. The book is available at $3 per copy from the association, Hudson, Iowa.

Polyvinyl latexes for paint formulations are subjects of "Service Bulletin G-16," available from B. F. Goodrich Chemical Company, 3135 Euclid Avenue, Cleveland, Ohio. The brochure deals primarily with "Geon 450X3," a polyvinyl latex said to show promise for outside applications.

Chemical Specialties Manufacturers Association, 50 East 41st street, New York 17, has issued an authoritative compilation of state laws and regulations effecting quality and sales of **antifreeze solutions.** Cost of the antifreeze compilations, as well as **brake fluid** data which was made available last year, included together in an 8½ by 11-inch loose leaf binder, is $6 per copy, plus postage. Orders should be sent to the above address.

Zirconium and Hafnium, a twelve-page illustrated booklet, has been issued by U. S. Industrial Chemicals Company, New York, a division of National Distillers Products Corporation. The booklet describes the uses of zirconium and hafnium, their mechanical and physical properties, and describes U.S.I.'s sodium process for producing the metals. Copies are available on request from U.S.I., at 99 Park Avenue, New York 16.


. . . FROM A VAST CRESYLIC RESERVOIR *
PHENOLS
CRESOLS
CRESYLIC ACIDS
PITT-CONSOL
CHEMICALS
* The first completely continuous processing plant for cresylic acids, cresols and phenols

For your cresylic needs come to PITT-CONSOL! Whatever your end use—phenolic resin, detergent or metal cleaner . . . disinfectant, pesticide, weed killer . . . pharmaceutical . . . flotation agent . . . oil or gasoline additive . . . solvent or other—specify PITT-CONSOL. You'll get prompt delivery of highest purity in the quantities you require, today *and* tomorrow. For more information or complete technical assistance, please write or call.

PITT-CONSOL
CHEMICAL COMPANY
191 DOREMUS AVE., NEWARK 5, N. J.

A SUBSIDIARY OF PITTSBURGH CONSOLIDATION COAL CO.

If it's

PHENOL *you need*

YOU CAN DEPEND ON DOW

CALL OUR NEAREST SALES OFFICE OR WRITE: THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

What bismuth salts do you need

for your pharmaceutical preparations?

You name the exact type of Bismuth Compound you need and the chances are J. T. Baker Chemical Co. can supply it—for Baker is a specialist in the production of a wide variety of Bismuth Salts of high chemical purity and precise physical specifications.

This high quality is available in a number of Bismuth Compounds (see list on this page), made especially for use in tablets, capsules, powder mixtures, ointments, or liquid suspensions.

Bismuth Salts are made from specially selected bismuth metal, reacted under close control. This careful processing is important when these salts are used as ingredients, or used as a starting point for the synthesis of organic bismuth compounds.

Many leading drug and pharmaceutical houses value Baker fine chemical purity and uniformity as a safeguard to the quality of their own products. If you are a user of Bismuth Salts or other fine chemicals where "Purity by the Ton" is required, may we send you samples and prices? Let us know your requirements.

J. T. Baker Chemical Co., Executive Office, Phillipsburg, N. J.

BISMUTH NITRATE
Purified Crystal

BISMUTH OXYCHLORIDE
'Baker Analyzed' Reagent Powder

BISMUTH SUBCARBONATE
U.S.P. Extra Light Powder

BISMUTH SUBCARBONATE
U.S.P. Light Powder

BISMUTH SUBCARBONATE
U.S.P. Medium Powder

BISMUTH SUBCARBONATE
U.S.P. Heavy Powder

BISMUTH SUBGALLATE
N.F. Powder

BISMUTH SUBNITRATE
N.F. Powder

BISMUTH SUBSALICYLATE
U.S.P. Powder

Baker CHEMICAL

Baker Chemicals

REAGENT • FINE • INDUSTRIAL

Drugs, Fine Chemicals

Trade sources reported little change in drug and fine chemicals markets last week. Prices were unchanged and firm with the exception of the consistently weak tone in hard chemicals going into feed supplements and feed grade concentrations of B-vitamins. Producers anticipated a good seasonal upturn in ascorbic acid demands although it was pointed out that this item has become a good year round seller largely independent of seasonal fluctuations in demand.

Degras was said to be a little easier in some quarters. Quotations were unchanged. It was said that feeling in the lanolin industry was that prices are too low since a number of increased cost factors have plagued dealers in the past year. However, observers were uncertain as to whether a change in price would be forthcoming in view of the highly competitive nature of this market.

Orderly trading was noted in markets for hexachlorophene and G-4. It was said that the former item continues to find its principal market outlet as a base for detergent and surgical scrub soaps while G-4 is in good use in cosmetic emulsions and as a fungicide. Prices were firm and unchanged.

Piperazine and salts were firm and supplies and trade needs were reported in good balance after the reductions of last month. Ready availability and production expansion were again cited as reasons for producers having been able to substantially reduce prices in these markets.

Bromides were moving in moderate business volume. Some buyer resistance has been noted since the advances initiated in early February. Informants did not anticipate a price revision here despite the rescinding of the bromine advance of February. It was felt that buying would continue to be restricted to immediate needs in this market. Producer inventories were at a comfortable level.

Makers of monosodium glutamate claimed a slight increase in sales volume thus far this year over a comparable period last year. Increased freight rates was said to have put a further squeeze on profit margins as MSG continues to be sold on a delivered basis.

A producer revealed that the company's production of Salk vaccine would be doubled if possible as a result of a request from the United States Public Health Service. Record sales and a good increase in dollar volume was accredited, by a major pharmaceutical house, to continued successful marketing of its tranquilizer and antibiotic products. The same producer predicted another excellent year in prospect for products featuring increased specificity of action. This development was said to be a logical outgrowth of research efforts of the past two years.

N-Acetyl-p-Aminophenol—Producers remaining in the manufacturing field on this item, reported a growing interest and use in pharmaceutical specialties and over-the-counter type products. Sales volume was still relatively small compared to other analgesics, but its market position was one of growing interest somewhat analogous to the situation prevailing on salicylamide. Spot prices were unchanged.

Aluminum Hydroxide—Demand was routine. Dried USP aluminum hydroxide as well as pharmaceutical gel material was unchanged in price. Supplies were adequate and conditions substantially unchanged from last reports.

Antibiotics—Prices were firm and supplies and demands were said by trade sources to be in good balance. The last price change involving streptomycin, dihydrostreptomycin and penicillin salts occurred early this year. It was expected that newly marketed antibiotics products would continue to stress greater specificity of action. It was said, too, that research efforts would continue to be directed toward possible synergistically acting antibiotic combinations. It was pointed out that an important part of the value of this type of chemotherapy lies in the fact that full biological activity can be maintained while oftentimes harmful side effects can be minimized or eliminated. A major pharmaceutical house announced that intensified research efforts would be made in the coming year to further strengthen drug therapy aimed at such major killers as cancer and heart disease.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
65.27	65.27	65.27	65.84

For Current Prices see Page 9

Ascorbic Acid—Demands for vitamin C continued at a brisk pace and trade sources were expecting a good seasonal upturn as the harvest season approaches. However, it was again pointed out that continued year round use of vitamin C in all kinds of food and pharmaceutical preparations has made this market largely independent of seasonal fluctuations in demands. Prices have been unchanged for over a year.

Benzoic Acid—Technical and USP material moved to consumer channels at a seasonally normal pace according to trade sources. Price was unchanged from last reports. Producers stocks were ample for the moderate requirements of the trade. USP material in 100 pound lots or more continued to be listed at 54c. per pound. Observers indicated that no changes were expected.

Bismuth Salts—Trade sources reported bismuth subcarbonate and subnitrate in routine demand while calls for other bismuth salts were steady with sales at a low volume. Prices have been unchanged in this market for many months. Producer inventories were ample and consumers continued to operate on a hand to mouth basis. No changes were anticipated in this market.

Bromides—Prices were maintained at the advanced levels attained in early February of this year. Trade sources did not anticipate a revision of prices in this market despite the recent rescinding of the bromine advance put into effect in February. Producer inventories were said to be at a comfortable level although some buyer resistance was reported with buying restricted to immediate needs.

Citrates—Seasonal demands were reported by major producers last week. Supplies were entirely adequate and shipments were said to be confined primarily to immediate need. Prices in effect for many weeks were unchanged. Citric acid was moving in good business volume and sodium citrate demand was said to have shown a slight increase thus far over reports of last month.

Degras—The market was said to be a little easier in some quarters. Dealers continued to quote a range of 10c. to 12c. on neutral while common was listed at 21c. to 23c. per pound. Stocks were ample and moved from primary centers to consumer levels at a normal rate. Increased ocean freight rates were said to have narrowed profit margins of dealers slightly in recent months.

G-4—Prices in this market have been unchanged for many months. Best market outlets for purified material continued to be in the cosmetic industry for cosmetic emulsions. Chlorophene also continued to find good trade acceptance as a preservative and fungicide. Observers noted that technical material was moving in good volume to consumers in the textile industry. Stocks were ample to fill the requirements of the trade.

Hexachlorophene—Good demands were noted for this item to be used in detergent, deodorant and surgical soaps. It was estimated that 95 percent of scrub soaps used in hospitals are hexachlorophene based. Continuing good demands were also reported from cosmetic and pharmaceutical makers who utilize the antiseptic properties of hexachlorophene. Price was unchanged since the 4c. per pound reduction in January.

Lactates—A dealer reported the flurry of buying interest experienced in the past

Greeff

SERVING THE CHEMICAL INDUSTRY SINCE 1880

GLYCOL MONOSALICYLATE

For the past 4 years Fries Bros., Inc. have manufactured this topical analgesic on a commercial scale. Due to increased demand they have expanded their manufacturing facilities.

We invite your inquiries.

Manufactured by
FRIES BROS., INC.
Carlstadt, New Jersey

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK, N. Y.
TRIBUNE TOWER, CHICAGO, ILLINOIS

Bio-Chemical Department

THE ARMOUR LABORATORIES
A DIVISION OF ARMOUR AND COMPANY

offers

BILE ACIDS

Dehydrocholic acid • Desoxycholic acid
Ox Bile Extract, N.F. X, Powder or Granular
Ox Gall Powder or Granular • Mixed oxidized bile acids
the most complete line of bile products and derivatives
and . . . custom processing in the fields
of extraction, concentration, purification, formulation and lyophilization

Our technical representatives are always available for consultation.
Write for additional information and details:
BIO-CHEMICAL DEPARTMENT
THE ARMOUR LABORATORIES
P.O. Box 511, Kankakee, Illinois

FOUNDED T&B 1856

Over A Century of Service

GUMS

Arabic Karaya Tragacanth

Textile Print Gum (Tab-A-Tex)

Locust Bean Guar

Phone
Algonquin 5-1588

THURSTON & BRAIDICH

286 Spring St. New York 13, N.Y. • Agents in Principal Cities in U.S.A.

Warehouses: P. N. SODEN & CO. LTD.—2143 St. Patrick Street, Montreal, Canada
A. C. DRURY & CO. INC.—219 East North Water Street, Chicago, Illinois
MELVIN VINCENT ASSOC.—1807 East Olympic Blvd., Los Angeles, California
M. O. GROVE & CO.—310 Sacramento Street, San Francisco, California

Drugs, Fine Chemicals

several weeks for potassium lactate had largely subsided and demands were being made at a normal pace. Sodium and calcium lactate sales were steady at a low volume. Business over the first quarter of the year was said, by an observer, to have shown a slight decline from the levels of a comparable period last year. A recent report indicates that researchers are seeking additional ways of using lactose in industry through fermentation methods. It was said that less than 4 percent of roughly five hundred million pounds of lactose in cheese whey turned out every year is separated and refined. It was pointed out that lactose in its least expensive form can be converted, through fermentation chemistry, to a number of chemicals which in turn are changed to useful materials such as riboflavin and butanol. However, it was agreed that lactose cannot successfully compete with dextrose and sucrose as a sweetening agent since it is less soluble and less sweet.

Lanolin—Business continued very good and firm prices on all grades were quoted. There was said to be a general feeling in the industry that prices were too low since a number of increased cost factors have plagued producers during the past year. However, it was pointed out each producer is loath to make a price change in view of the highly competitive nature of the market.

Mercurials—Needs were routine and prices unchanged from last reports. Dealers reported stocks entirely adequate and well able to handle the current modest requirements of the trade. Pharmaceutical needs in this market have been depleted in recent years it was said with the advent of more potent antibiotic products with fewer and less severe side effects.

Methionine Hydroxyanalog — Prices were advanced effective immediately on spot and July 1 on contract. In 20,000 pound lots or over, the new price per pound will be $2.20 as compared with the former schedule of $2.10. In smaller quantities, the new price will be $2.45 as against the old price level of $2.21.

Monosodium Glutamate—Domestic producers queried continued to maintain that imports on this item are minimal when compared to total domestic production. Sales volume thus far in 1957 was said to be slightly in advance of a comparable period last year as overall use of this popular flavor-boosting agent continues to increase and producers explore new market outlets for MSG. Consumers, as usual, operated in a hand-to-mouth manner while producers reported their inventories were at a reasonable level. Prices are unchanged since the decline of 5c. per pound early this year. Increased freight rates have put a further squeeze on profit margins, it was said, since MSG has always been sold on a delivered basis.

Niacin—Producers continued to list niacin at $8 per kilo for USP material. Demands were good from pharmaceutical makers as well as food processors for B-complex fortification use. Competition was heavy for the substantial volume of business available in the feed trade. Last change in this market was the $2.50 per kilo reduction in the price of niacinamide last month. Observers in the trade anticipated no changes in this market in the near future.

Piperazine—Tankcar price was quoted at $2.75 per pound while carloads are $2.84 per pound. Trade sources anticipated no further changes when queried. Expanded production and ready availability have made it possible for producers to reduce prices substantially since the fall of 1956. Piperaine salts reflected the steadiness in raw material and were unchanged after the reductions of last month. Trade acceptance of piperazine citrate continues good, especially in the feed industry for use as a veterinary deworming agent.

Riboflavin — Long established prices were quoted by producers in the trade. USP material was 6½c. per gram while feed grade was 4½c. The latter market continues to show a soft tone. Material at concentrations of roughly four grams to the pound was moving in moderate business volume to consumers for use in poultry feeds. Sellers were inclined to force the pace in a highly competitive market.

Sodium Benzoate—Sales volume for the first four months of this year was said to have been a little disappointing but it was pointed out that the traditionally heavy consuming season for USP material in foods and pharmaceutical items was fast approaching. Trade sources anticipated no price changes. As in other segments of the industry, consumers appeared to be buying for immediate needs with prompt shipment required. Use of technical material in water based paint formulations to prevent tin plate corrosion was said to have found gradual acceptance in the trade during the past few years.

Sulfonamides—Producers reported facilities continuing to operate at high levels. Material was moving to consumers at a rapid pace with only intermittent production difficulties of a day or so noted. Stocks were ample and prices of long standing in the trade were unchanged. Exports of sulfonamides continued on a level with last year while sales volume for veterinary use was said to have held its own.

Theobromine—Imports of theobromine alkaloid from West Germany in January amounted to 6,774 pounds, from France 6,200 pounds and from Switzerland 2,205 for a total of 15,179 pounds. Total value was $42,461 for a per unit value of $2.80.

Thiamin—Last price change in this market was early in 1956. Prices quoted were firm and trading continued in an orderly fashion according to trade sources queried last week. Imports have dwindled from the high levels of last year which forced

Neomycin Bacitracin

Tyrothricin Gramicidin

All four from Penick

For over ten years we have specialized in making antibiotics for the trade . . . and *only* for the trade.

We were among the first to recognize the advantage of combining antibiotics to widen their effective range and increase their potency. We diversified our line to provide a single source for most of the antibiotics our customers commonly require. Our technical staff can assist in choosing the single antibiotic or combination best-suited to your particular needs.

Shipments are made promptly to enable you to minimize your inventory. And dealing with one supplier cuts your handling costs considerably.

However you use antibiotics—in pharmaceuticals, cosmetics, veterinary or agricultural formulations—make Penick your primary source of supply. Write today for literature and price quotations.

Facilities are available for custom manufacturing in fermentation chemistry.

PENICK

Manufacturers of Fine Chemicals and Drugs

S. B. PENICK & COMPANY 50 CHURCH ST., NEW YORK 8 735 W. DIVISION ST., CHICAGO 10

Drugs, Fine Chemicals

the domestic price down. Both mononitrate and hydrochloride were moving in moderate business volume to consumers in the pharmaceutical industry.

Botanicals

Trading in botanical drugs continued spotty last week. Although dealers have reported good interest in new crop domestic drugs, not much in the way of stocks had been received by dealers as yet. Orderly trading was noted in balsams while the market fo. Colombo root was dull and featureless as was the case with lycopodium, both low volume items. Observers were listing both African and Ceylon papain at $6 per pound. Supplies were light in the face of moderate consumer demands.

Balsams—Prices in this market are substantially unchanged from last reports. Copaiba was quoted in some quarters fractionally higher while an inside price of $4.25 was quoted for Tolu as against a listing of $4.50 earlier in the year. Quotations on Peru were steady at $1.25 per pound. Oregon fir balsam was available from major dealers in limited quantities. However, some trade sources continued to report a virtual dearth of stocks due to the fact that high wages are being paid Oregon workers in aircraft plants and on natural power projects. Supplies and demands for Canadian fir balsam appeared in good balance.

Columbo Root—Supplies were plentiful and prices unchanged from last reports. Trade sources pointed out that demands had been spotty over the past season with sales steady at a low volume.

Jalap Root—Nominal price of 90c. per pound for NF root was quoted while powder was at $1.15. Dealers anticipated no alleviation in the supply situation for some time to come. Consumer interest was said to be restrained.

Lycopodium—This item continued to be high priced and in somewhat tight supply last week. A price of $3.50 to $4 was quoted. Demands were spotty with sales steady at a low volume.

Papain—Ceylon and African papain was again reported at the high price levels prevalent in the trade for the past month.

Synthetic Narcotic

—Continued from page 7

oped rapidly since the patent on one of the most addictive synthetics has recently expired, and its manufacture is now open to everyone.

Also, new products are being offered on the market as free from addiction-forming liabilities, but found latter to have addictive qualities.

Title of Karsten Bill

The Karsten bill is to be known as the "Narcotics Manufacturing Act of 1957." It sets out a list of twenty-five basic narcotics subject to its provisions. The list can be added to on facts developed at hearings before the Secretary of the Treasury or his delegate.

No person may manufacture a narcotic drug unless the drugs falls within a basic class named in the law, and such persons holds a currently effective license and manufacturing quota with respect to such basic class of drug.

Issuance of licenses to manufacture is to be governed by such factors as the applicant's maintenance of effective controls against the diversion of the drug into other than legitimate channels, promotion of technical advances in the art of manufacturing narcotic drugs and development of new narcotic drug products, and the applicants education, moral character and reputation.

Calendar year quotas are to be fixed for each applicant on or before June 1 by the Secretary. The quota cannot be less than the sum of (1) the licensed manufacturer's net disposal of the drug during the immediately preceding calendar years and (2) one-half of such manufacturers' net disposal of the drug during the immediately preceding calendar year, less his inventory on December 31 of the preceding year.

TIC
Foremost in Water Soluble Gums
Pre-tested for
*EMULSIFYING
*THICKENING
*SUSPENDING
*STABILIZING
Write for working Samples of...
TRAGACANTH
ARABIC
KARAYA
IRISH MOSS
©GUAR
TIC Tragacanth IMPORTING CORP.
Since 1909 your guarantee... Quality—Service
141 EAST 44th ST., N. Y. 17, N. Y.
OXford 7-3216

METALSALTS CORPORATION
8-HYDROXYQUINOLINE
METALSALTS* CORPORATION
Manufacturing Chemists
200 WAGARAW ROAD, HAWTHORNE, N. J.
HAwthorne 7-6000 New York: PEnnsylvania 6-2626
*EXCLUSIVE SALES AGENTS FOR DAR-SYN LABORATORIES, Incorporated and HAWTHORNE LABORATORIES, Incorporated.

Mono
Oleates
Di

MADE TO MEET YOUR SPECIFICATIONS
THE FLAME AND THE FLASK—SYMBOL OF QUALITY
of
Diglycol
Ethylene Glycol
Diethylene Glycol
Polyethylene Glycol
Propylene Glycol
Polyoxyethylene
Butoxyethyl
Glycerine
WRITE FOR SAMPLES, DATA, ETC.
The C. P. Hall Co.
CHEMICAL MANUFACTURERS
5147 W. 67th Street, Chicago 38, Illinois
AKRON, OHIO • NEWARK, N. J. • CHICAGO, ILL. • LOS ANGELES, CAL.

GUMS
ARABIC
GHATTI
GUAR
KARAYA (INDIAN)
LOCUST (CAROB FLOUR)
TRAGACANTH
MENTHOL (NATURAL CRYSTALS)
JAPAN WAX
QUINCE SEED
CASEIN
EGG ALBUMEN
BLOOD ALBUMEN
PAUL A. DUNKEL AND COMPANY, INC.
IMPORTERS AND EXPORTERS • EST. 1914
26 JOURNAL SQ., JERSEY CITY 6, N. J.
TEL: OLdfield 6-6400
NEW YORK TEL: WOrth 4-3341
CHICAGO: 320 W. OHIO ST.
TEL: SU. 7-2462
REPRESENTATIVES:
CHICAGO: CLARENCE MORGAN, INC.
BOSTON: P. A. HOUGHTON, INC.
PHILADELPHIA: HARRY W. GAFFNEY
LOS ANGELES: C. H. OWINGS
ST. LOUIS: VICTOR ROBERSON CO.

Consulting Chemists and Engineers

ASSOCIATION OF CONSULTING CHEMISTS AND CHEMICAL ENGINEERS, INC.

50 East 41st Street, Room 82 — New York 17, N. Y. LExington 2-1130

A Clearing House — Reg. U S — *For Consultants* — Pat. Office

WHEN YOU NEED A CONSULTANT ADDRESS THE ASSOCIATION
NO CHARGE FOR THIS SERVICE

Members Located From Coast To Coast Render Services In Any Given Field

Cable: CHEMANENGS, New York

R. S. ARIES & ASSOCIATES
Consultants to the Chemical Industries
New Profitable Products
Process Analysis—Market Research
Technical & Economic Surveys
Sale and Licensing of Efficient Processes
Complete Chemical and Drug Plants
41 East 42d St. New York 17, N. Y
OXford 7-7240

BJORKSTEN RESEARCH LABORATORIES
Sponsored Industrial Research
MADISON, WIS .....323 W. Gorham St
CHICAGO, ILL. .....1525 E 53 St
CLEVELAND, OHIO .....10524 Wilbur Ave
HOUSTON, TEXAS ....2611 Sunset Boulevard
WASHINGTON D C.....412 Fifth St. N W

CALKIN & BAYLEY, INC.
INDUSTRIAL CONSULTANTS
50 East 41st Street
New York 17, New York
LExington 2-1954

CHEMICAL ANALYSES
Complete — $75 per sample
Essential oils, drugs, fats, aa chemicals, paints oils, pesticides, petro-hemicals, protective coatings, textile chemicals, waxes, specialties, water cosmetics, etc.
Send credit references with samples
CHEMASTER LABORATORIES
Box 16, Steinway Station, Long Island City 3, N.Y
YEllowstone 2-0203

DI CYAN & BROWN
Consulting Chemists
12 East 41st Street, New York 17, N. Y.
MUrray Hill 5-0011
DRUG AND COSMETIC PROBLEMS AND RESEARCH
NEW PRODUCTS

Fitelson Laboratories, Inc.
Consulting and Analytical Chemists
J. Fitelson, Ph.D., Director
Foods, Spices, Oils, Drugs, Cosmetics
Specialist on labeling, sanitation and chemical problems connected with F D A procedures
254 W 31st Street, New York 1, N. Y
OX 5-0765

FOOD RESEARCH LABORATORIES, INC
FOUNDED 1922
Bernard L. Oser Ph.D., Dir
RESEARCH—ANALYSES —CONSULTATION
Biological, Nutritional, Toxicological Studies for the Food, Drug and Allied Industries
48-14 33rd St., Long Island City 1, N. Y
STillwell 4-4814

HUDSON LABORATORIES, Inc.
Consulting Chemists and Bacteriologists
Roger F Lapham, M.D. Director
Testing Analysis Formulation Research
BACTERIOLOGY, CHEMISTRY, TOXICOLOGY
Antibiotics and Vitamins
Foods Drugs Cosmetics
Disinfectants Antiseptics Sanitizers
117 W. 13th Street, New York 11, N. Y
ALgonquin 5-6290

LANSING — CONSULTING CHEMIST — CHEMICAL ENGINEER
ARTHUR C. LANSING
PHONE LINCOLN 7-1113 — 323 WEST SIXTH ST. ROYAL OAK, MICH.

LEBERCO LABORATORIES
Hormone Assays
Biological Assays
Pharmaceutical and Cosmetic Research
Sterility Tests • Toxicity Studies
Send for information concerning our services
125 Hawthorne St., Roselle Park, N. J.

LAWALL & HARRISSON
CHEMICAL • BACTERIOLOGICAL
PHARMACOLOGICAL
Analyses • Consultation
Research
FOOD AND PHARMACEUTICAL PROCESS ENGINEERING
Div O 1921 Walnut Street
Philadelphia 3, Pa.

MOLNAR LABORATORIES — Consulting Testing and Research
• Organic Synthesis
• Clinical Studies
• Product Development & Control
• Toxicity and Dermatitis Tests
• Disinfectant Testing
211 E 19th St., New York 3, GR 5-1030
Cable Address Molchem

W. S. PURDY COMPANY
ESt 1865
Analytical & Consulting Chemists
TESTING OF PETROLEUM OILS WAXES AND RELATED PRODUCTS
Bayway Terminal Bldg.
c/o Charles Martin & Co.
Elizabeth, N. J.
Phone ELizabeth 3-3894

RESIN RESEARCH LABORATORIES, INC.
406 Adams Street, Newark 5, N. J.
Market 2-5251
RESEARCH, DEVELOPMENT TESTING, EVALUATION
Resin and Polymer Synthesis
Coatings—Paints, Varnishes, Lacquer, Waxes, Mastics
Moulding, Laminating, Casting, Extrusions, Calendering, Adhesives
Corrosion, Insulation
Testings, Evaluation, Application
Market Research

SEIL, PUTT & RUSBY, INC.
Established 1921
Stephen S. Voris, Ph.D., President
Experts in analyses, of drugs, essential oils, spices, rotenone and pyrethrum and other organic insecticides, flavors alcoholic liquors, toilet preparations, proprietaries and special formulas
16 E. 34th St., New York 16, N. Y.
Phone MUrray Hill 3-6369

LOUIS L. SHAPIRO
CHEMICAL CONSULTANT
28 Middagh St., Brooklyn 1, N. Y.
TRiangle 5-7715
SPECIALIST—Glycol Esters, Fats, Oils, Stearic Acid, Fatty Acids, Glycerine, Waxes, Emulsifiers, Protein, Fertilizers, Tallow Rendering, Packing House By Products, Soaps, Cosmetics, Adhesives, Distillation, Dowtherm Processes, Testing Research, Economic Surveys.

SKEIST LABS
POLYMER SPECIALISTS
Sponsored research
Advisory consulting
Commercial development
• PLASTICS • ADHESIVES
• RESINS • COATINGS
89 Lincoln Park, Newark 2, N. J.
MArket 3-5002

J. L. K. SNYDER, Ph.D.
Specializing in Management Problems, Product Development, Distribution, and Sales Promotion in the Chemical, Pharmaceutical and Nutrition Fields.
Suite 501, 420 Lexington Ave.
New York 17, N. Y.
Telephone: MU 9-5870

RESEARCH • ANALYSIS • ENGINEERING
F.S. STEWART ASSOCIATES
FRANCIS S. STEWART, M.A. DIRECTOR
INDUSTRIAL CHEMICAL ENGINEERS
PLASTIC CONSULTANTS
10819 VENICE BLVD., PHS: TExas 0-3164
LOS ANGELES 34, CALIFORNIA

STILLWELL & GLADDING, INC.
130 Cedar Street, New York 6, N. Y.
Analysis Inspection Sampling
Chemicals, drugs, fats, oils, fertilizer, insecticides, glycerine, soaps, solvents, waxes, rotenone, etc.
For Over 80 Years

TECHNICAL ENTERPRISES, INC.
CHEMISTS ENGINEERS
CONSULTANTS
Process Development and Process Engineering
Complete Chemical and Drug Plants
31 South St. New York 4, N. Y.
WHitehall 3-1544

UNITED STATES TESTING COMPANY, INC.
1415 Park Avenue, Hoboken, N. J.
Testing — *Research*
Chemistry, Engineering, Electronics, Psychometrics, Textiles, Foods, Leather, Minerals, Microscopy, Product Certification, Engineering, Inspection, Product Development
BRANCH LABORATORIES
Boston · Brownsville · Dallas · Denver
Los Angeles · Memphis · New York
Philadelphia · Providence · San Angelo

EMERSON VENABLE*
AND ASSOCIATES
Consulting Chemists & Engineers
Pa. Registry No. 12606
PHYSICS
CHEMISTRY
ENGINEERING
TOXICOLOGY
PUBLIC HEALTH
METALS and ORES
CONTRACT RESEARCH
PROCESS and PRODUCT DEVELOPMENT
Member—A.C.C. & C.E.
HI-land 1-8045
111 Fifth Avenue Pittsburgh 32, Pa.

WELLS LABORATORIES, INC.
25-27 Lewis Ave.
Jersey City 6, New Jersey
Phones: (N. Y.) Digby 9-0127
(Jersey) Oldfield 3-1907
CONSULTANTS • RESEARCH • TESTING
MICROBIOLOGY, CHEMISTRY, TOXICOLOGY | Biological Deterioration and Preservation
PAINTS, FOODS, DRUGS, COSMETICS, TEXTILES, PLASTICS, OILS, DISINFECTANTS

ROGER WILLIAMS
Technical & Economic Services, Inc.
• Chemical Economics
• Chemical Market Research
• Product Evaluation
Main Office: PO Box 428, Princeton, N.J.: Princeton 1-0209
New York Office: 148 East 38th St., NYC 16: MUrray Hill 5-5257

WISCONSIN ALUMNI RESEARCH FOUNDATION
Projects, Consultation, and Production Control Services in Biochemistry, Chemistry, Bacteriology, Toxicology—Insecticide Testing and Screening.
Write for price schedule.
WISCONSIN ALUMNI RESEARCH FOUNDATION
P.O. Box 2217-Y, Madison 1, Wisconsin

Navy Told It Must Justify Paint

—Continued from page 5

and Waldo B. Utley, president of Prisma Products Corporation, New Orleans, La.

They testified that private industry is well able to meet all the paint needs of the navy, including the hot plastic shipbottom type of coating which the navy developed early in World War II and of which it has been the only producer. Specifications for this paint were kept under wraps by the department until about a year ago.

Small Business Will Participate

"If this navy paint production were made available for bid by private paint manufacturers," Mr. Utley declared, "it is a foregone conclusion that small business can and will participate in supplying the navy's needs. There is no great problem for my company to produce shipbottom plastic and vinyl type paints. Installation of some equipment—a worthwhile investment if the procurement is assured—is the only step necessary to qualify my company and other small manufacturing plants to become a navy paint supplier."

Mr. Everett told of a study made of navy paint manufacturing operations in 1952 by a committee of the National Security Industrial Association. The study was made at the request of then Secretary of the Navy Kimball. The committee found that private industry could supply all of the navy's paint requirements. It found no evidence of any important economies after proper consideration had been given to the inherent differences between accounting for taxpaying private industry enterprises and for tax-free government operations.

"I disagree with the navy contention that private industry cannot manufacture shipbottom paints now," Mr. Everett said. "This is more or less a question of equipment and testing procedure. It is certain we have several thousand chemists in our industry who can read a specification and follow it. Further, we have been called upon to supply coatings for jet planes, rockets, ammunition and other products of the military which require careful formulation and manufacture. To say that we cannot produce an antifouling paint is a challenge our industry is ready to refute."

Mr. Boland presented the main arguments of industry in favor of closing the plants and reported on details of a survey made of the industry on its ability to meet the specifications of the department for paints.

"The navy manufactures thirty-three different paints, at least five of which are in the shipbottom category," Mr. Boland said. "As soon as full information was available, the National Paint, Varnish and Lacquer Association conducted a survey of the ability of the paint industry to meet the navy's needs with respect to all types of paint. Copies of the results of the survery have been supplied to the Defense department.

"It reveals that seventy-six companies report that they can manufacture shipbottom coatings. All of these companies have laboratory facilities and are willing to have their plants inspected. Sixty-five of these companies can produce all the various types of shipbottom paints and eleven can produce all except the hot plastic type. They can produce in excess of five and one-half million gallons of these shipbottom paints which is approximately ten times current navy requirements without any strain on their respective capacities. It is particularly noteworthy that the great majority of the paint manufacturers replying to the survey are in the small business category.

All Others Supplied Privately

"It should be stated of record that private manufacturers of paint, varnish and lacquer products supply all of the needs of the private marine industry, as well as all paint products used on ships and vessels of the army, coast guard and maritime commission. Likewise, the exacting specifications for coatings for the ordinance department and the US Air Force are met, and paint products are produced in accordance therewith by private paint manufacturers.

"There are other factors advantageous to the nation in having all navy paints manufactured in private plants. The first in importance are security and research. The navy paint plants are located in vulnerable areas on two coasts. Private paint factories, capable of supplying the navy's needs are located in virtually every state, assuring adequate and constant supplies.

"Since the beginning of the current fiscal year, we have noticed a sharp increase in the purchase of chemicals and raw materials by the navy paint plants. Estimates, based on their purchases, indicate that production of paint has doubled in the navy paint plants and are depriving small business of a far greater volume than was originally stated.

"I might cite two very recent examples. On March 8 the navy issued invitations to bid on 108,000 pounds of cuprous oxide. This is sufficient to make 200,000 gallons of the hot plastic paint and about two-thirds of previously estimated annual production in both navy paint plants. They had previously used during the first quarter of this fiscal year more than 14 million pounds of raw materials, sufficient to make more than 5 million gallons of just three types of paint.

"Even more glaring is the invitation to bid issued on March 19, 1957, for 3,724,600 pounds of alkyd resin. This is used in the manufacture of haze gray paint and zinc chromate primer. This tremendous quantity will make more than 1 million gallons of haze gray, more than double the estimated production for 1955 or 2 million gallons of zinc chromate primer, almost seven times the scheduled production for 1955 and equalling the total production of all paints in both navy paint plants for 1955.

"Either it is an evident waste or the navy is greatly expanding the paint manufacturing activities. If the first is true, then the navy paint plants should be closed because they are wasteful. If the second is true, it again demonstrates the intent of agencies to circumvent policies in the interest of the nation. An order should be issued to cease all purchasing of raw materials and close the plants. It will be a service to our country and to small business which is deprived of making and furnishing these govenrment supplies."

Sun Oil Elects Wright Marketing Vice-President

Willard W. Wright has been elected vice-president in charge of marketing for Sun Oil Company, Philadelphia, replacing Frank R. Markley.

Mr. Markley, a director, will remain as a vice-president on a new assignment to be announced later. Mr. Wright, also a member of the board, was formerly general sales manager of the company's marketing department.

Barium Monohydrate

—Continued from page 3

cations for features of the process have been undertaken.

"The new method will enable us to produce barium monohydrate of at least 99 percent purity," he said. "We plan to market the chemical at the going price of barium oxide on an available barium basis. This should effect sizable economies in end-product manufacture for users of the chemical."

One of the major uses of barium hydrate and barium oxide is in the manufacture of lubricating oil additives.

Plans for the new unit, which will cost over $1 million, are now being drawn. Construction will get under way shortly and the plant is expected to be in production early in 1958.

Chemical Products Makers Face Tighter

—*Continued from page 3*

tions, the scope of the bill is broad enough to cover thousands of other articles as seen in its definition of a "hazardous article" and other terms used.

A "hazardous article" is defined as "any article or mixture of articles which is (1) toxic, (2) corrosive, (3) an irritant, (4) flammable, (5) radioactive, or which (6) generates pressure through decomposition, heat or other means, and which, when used and handled in any customary manner or in a manner reasonably to be anticipated, is likely to cause substantial bodily injury or illness to man."

Other Definitions

Other definitions in the bill include:—

"The term 'toxic' shall apply to any article which has the inherent capacity to produce bodily injury to man through ingestion, inhalation or absorption through the skin.

"The term 'poison' means any toxic article which falls within any of the following categories: Produces death within forty-eight hours in half or more than half of a group of ten or more laboratory white rats weighing between 200 and 300 grams, at a single dose of 50 milligrams or less per kilogram of body weight, when orally administered; or produces death within forty-eight hours in half or more than half of a group of ten or more laboratory white rats weighing between 200 and 300 grams, when inhaled continuously for a period of one hour or less at an atmospehric concentration of two milligrams or less per liter of gas, vapor, mist or dust, if such concentration is likely to be encountered by man when the article is used in any reasonably foreseeable manner; or produces death within forty-eight hours in half or more than half of a group of ten or more rabbits tested in a dosage of 200 milligrams or less per kilogram of body weight, when administered by continuous contact with the bare skin for twenty-four hours or less.

"If available data on human experience with any article in the above-named dosages of concentrations indicate results different from those obtained on animals, the human data shall take precedence.

"The term 'corrosive' is limited to any article which, when placed in contact with living tissues, will cause significant destruction of tissue by chemical action.

"The term 'irritant' means any article which is not corrosive within the meaning of subsection (1) of this section, but which, when placed in contact with normal living tissue, will induct a severe local tissue reaction.

"The term 'flammable' means, in the case of any article other than the contents of self-pressurized containers, an article which has a flashpoint of 80 degrees or less, as determined by the Tagliabue open cup tester, and, in the case of the contents of self-pressurized containers, any article determined by the secretary, after investigations, to be flammable and is so designated in regulations issued by him.

"The term 'radioactive' means any article which, as a result of disintegration of unstable atomic nuclei, emits energy."

Requirements of Label

A hazardous article packaged for the retail trade would be deemed to be misbranded and subject to seizure if it failed to bear a label which conspicuously displayed the name and address of the manufacturer, packer or distributor, the common or usual name of the hazardous components, a warning of the dangers involved and the actions to be followed or avoided to protect the life and health of man.

The secretary is given authority to grant exceptions to these general requirements in cases where the hazard is minor or the size of the package is such that full compliance would be an unreasonable burden on the manufacturer or packer.

The proposed law is applicable to hazardous articles while in interstate commerce or after they have come to rest on the shelves of the retailer. Violations are subject to penalties up to $500, and in the case of willful violations the penalty goes up to $3,000 and a year imprisonment.

Herbicide Development

—*Continued from page 7*

lent control of mustard, pigweed, lambsquarter, ragweed, and other weeds at rates of application which resulted in little or no injury to alfalfa, red clover, Ladino clover, lespedeza, flax, oats, corn, and some other crops.

Rates of application required to give good weed control with these new weed killers have been double the required rates for 2,4-D—or one-half to four pounds per acre, depending on the degree and type of infestation.

Certain differences in the selectivity of the two chemicals were noted, however. The herbicide 4(MCPB) was more toxic to alfalfa but less toxic to flax than 4(2,4-DB).

Besides killing broadleaved weeds in underseeded stands of cereal crops, the two herbicides should prove valuable in the establishment of pure stands of forage legumes, say weed-control specialists of USDA's Agricultural Research Service.

Other possible uses for the new herbicides are for the control of broadleaved weeds in forage-legume seed production fields, in flax, and in tolerant crops such as corn or rice grown in the vicinity of crops highly susceptible to 2,4-D and related herbicides.

The new compounds are available this year for limited trial use for the control of weeds in legume seed production fields. USDA emphasizes, however, that few suggestions for farm use can be made until more extensive trials are completed.

Two other experimental herbicides—simazin and EPTC—have produced striking results as selective pre-emergence weed killers. Simazin has appeared especially effective for pre-emergence control of weeds in corn, while EPTC has given good control of weeds in alfalfa, white and red clover, birdsfoot trefoil, soybeans, peanuts, corn, and other crops.

MEDICINAL CHEMICALS

Aminophylline, U.S.P.
•
Benzil
•
Benzilic Acid
•
Benzoin
•
Betaine Hydrochloride
•
Calcium Glutamate
•
Copper-Dichlor-Quinolinol
•
Dilodohydroxyquin, U.S.P.
•
Diphenylacetic Acid
•
Glutamic Acid and HCl
•
Hydroxy Dimethyl Pyrimidine
•
Iodochlorohydroxyquin, U.S.P.
•
Paba, N.F.
•
Paba Potassium
•
Paba Sodium
•
Phthalylsulfacetamide
•
Piperazine Salts
(Adipate, Citrate, Dihydrochloride, Phosphate and Tartrate)
•
Procaine Hydrochloride, U.S.P.
•
Quinolinol (Oxyquinoline) Salts and Derivatives
•
Rutin, N.F.
•
Sodium Propionate, N.F.
•
Succinic Acid Salts and Derivatives
•
Sulfacetamide, U.S.P.
•
Terpin Hydrate, N.F.
•

Write for our new 32 page Products Catalog

B. L. LEMKE & CO., INC.
LODI, NEW JERSEY

gane's

AMINOPHYLLINE

d,dl-DESOXYEPHEDRINE-HCL
DEHYDROACETATE-SODIUM
ISOPROPYLARTERENOL-HCL
MENADIONE
METHAMPHETAMINE-HCL
PHENACAINE-HCL
PHENINDIONE
L-PHENYLEPHRINE-HCL

Manufacturer of Fine Medicinal Chemicals

GANE'S CHEMICAL WORKS, INC.

677 Fifth Avenue, New York 22, N. Y. • Murray Hill 8-2410

Fine Chemicals Trade BPC Mark

PHARMACEUTICAL CHEMICALS

Aminoacetic Acid
Aminophylline
Amobarbital
Benzocaine
Benzyl Alcohol
Chlorobutanol
8-Hydroxyquinoline
Oxyquinoline Benzoate
Oxyquinoline Sulphate
Potassium Oxyquinoline Sulphate
Pentobarbital Sodium
Phenobarbital
Phenobarbital Calcium
Phenobarbital Sodium
Secobarbital Sodium
Theophylline

AROMATIC and FLAVORING CHEMICALS

Benzyl Alcohol
Cinnamic Acid
Diacetyl
Ethyl Phenyl Acetate
Phenyl Acetic Acid

TECHNICAL CHEMICALS

Allyl Acetone
Benzaldehyde
Benzilic Acid
Benzoin
Benzyl Alcohol
Benzyl Chloride
Benzyl Cyanide
Cyanoacetamide
Chrysanthemum-Monocarboxylic Acid Ethyl Ester
Dibenzyl Ether
2,5-Dimethyl Hexadiene-1,5
2,5-Dimethyl Hexadiene-2,4
Diphenyl Acetic Acid
Ethyl-2-Acetyl-4-Pentenoate
Glycine Ethyl Ester Hydrochloride
Methallyl Chloride
a-Phenyl Butyric Acid
Triglycollamic Acid

SPECIALTIES FOR PENICILLIN MANUFACTURERS

Methyl Phenyl Acetate
N,N'-Dibenzyl Ethylene Diamine Diacetate
Phenyl Acetic Acid
Potassium Phenyl Acetate Solution

MALONATES

Allyl-1-Methylbutyl Diethyl Malonate
n-Butyl Diethyl Malonate
Ethyl-1-Methylbutyl-Diethyl Malonate
Ethyl-1-Methylpropyl-Diethyl Malonate
Ethyl-Phenyl-Diethyl Malonate
1-Methylbutyl-Diethyl Malonate
1-Methylpropyl-Diethyl-Malonate
Phenyl Diethyl Malonate

MATERIALS PRODUCED ON ORDER

1-Acetyl-2-Thiohydantoin
Chloroacetamide
Glycine Amide Hydrochloride
Methyl Chloroacetate

BENZOL PRODUCTS COMPANY
237 SOUTH STREET · NEWARK 5, N. J.

IMPORTS at United States Ports

New York

AGAR—20 dms, T M Duche & Sons, Barcelona
10 bbls, Brown Bros, Barcelona
50 bls, Lee Trading Co, Pusan
ALUM—800 bgs, CMC Chemicals Inc, Liverpool
AMBER OIL—1 dm, Van Ameringen Haebler, Puerto Cortes
p-AMINOPHENOL—1 dm, Wedeman & Godknecht, Rotterdam
AMMONIUM CARBONATE—50 cs, Glasgow
AMMONIUM CHLORIDE—250 bgs, Chemical Manufacturing Co, Liverpool
AMMONIUM PERSULFATE—25 dms, Lo Curto & Funk, Hamburg
100 dms, Mohegan International Corp, Rotterdam
ANILINE DYES—59 dms, C A Haynes, Hamburg
39 dms, Hensel Bruckmann & Lorbacher, Hamburg
58 dms, Sandoz Chemical Works, Havre
2 dms, Arondy Corp, Liverpool
32 dms, Ciba Co, Rotterdam
17 dms, Carbic Color & Chemical Co, Rotterdam
9 dms, Heemsoth Kerner, Liverpool
ANISE SEED—200 bgs, M J Golombeck, Alicante
200 bgs, E E Bier, Alicante
100 bgs, Chase Manhattan Bank, Beirut
100 bgs, Alicante
ANNATTO SEED—130 bgs, Marcel Calvet, Guayaquil
200 bgs, M J Golombeck, Guayaquil
ANTIMONY—10 cks, Balex Co, Liverpool
ANTIMONY OXIDE—100 bgs, Balex Co, Liverpool
ANTIMONY REGULUS—100 cs, C Gitlan, Antwerp
APRICOT KERNELS—50 bgs, Istanbul
ARBUTUS LEAVES—200 bgs, E E Bier, Alicante
ARSENIC—109 bbls, L J Buck, Gothenburg
BARBASCO ROOT—67 bls, Astoria Panamericana, Callao
140 bgs, Hanover Bank, Callao
87 bls, Hanover Bank, Callao
BEESWAX—34 bgs, Curacao Trading Co, Ciudad Trujillo
61 bgs, Machado & Co, Ciudad Trujillo
40 bgs, H H Pike & Co, Tampico
50 bgs, Ciudad Trujillo
50 bgs, Havana
67 bgs, Genoa
182 bgs, Tampico
14 bls, Tampico
BENZOIN GUM—16 cs, Olson Importing Co, Bangkok
BISMUTH—75 cs, Cerro de Pasco Corp, Callao
BOIS DE ROSE OIL—5 dms, Ungerer & Co, Callao
BONE BLACK—809 bgs, Transatlantic Animal By Products Corp, Alexandria
CALCIUM HYPOPHOSPHITE—13 cs, Oxford Chemical Corp, London
CAMPHOR, POWDER—30 cs, Dieterle & Victory Co, Keelung
20 cs, O Kees & Co, Keelung
CANDELILLA WAX—232 bgs, Biddle Sawyer Corp, Tampico
663 bgs, Tampico
CARAWAY SEED—200 bgs, R J Spitz, Rotterdam
100 bgs, P H Petry, Rotterdam
400 bgs, Rotterdam
CARDAMOM—22 cs, Wm E Martin & Sons, Colombo
8 cs, Wm E Martin & Sons, Gothenburg
7 cs, H F Downing & Co, London
CARDAMOM SEED—10 cs, Cochin
CASEIN—200 bgs, Chase Manhattan Bank, Buenos Aires
500 bgs, F H Paul & Stein Bros, Buenos Aires
2,000 bgs, L N White & Co, Buenos Aires
2,440 bgs, A J Mills & Co, Auckland
2,520 bgs, A J Mills & Co, Wellington
160 bgs, Napier
3,000 bgs, Buenos Aires
CASSIA—2,460 pkgs, Rotterdam
819 bls, Rotterdam
CASTOR BEANS—3,190 bgs, C Tennant Sons & Co, Buenos Aires
559 bgs, Hollander Trading Corp, Port Au Prince
540 bgs, Hollander Trading Corp, Jeremie
1,947 bgs, Hollander Trading Corp, Port de Paix
400 bgs, Gonaives
OIL—393 tons, Recife
CELERY SEED—40 bgs, M J Golombeck, Marseille
CHESTNUT EXTRACT—500 bgs, Barkey Importing Co, Genoa
1,000 bgs, Bordeaux
CHLORINATED RUBBER—1,060 bgs, C M C Chemicals Inc, Liverpool
CHLOROPHYLL—24 dms, Airkem Inc, London
CHOLIC ACID—4 dms, L A Ferm Co, Buenos Aires
CINNAMON QUILLS—25 bls, Curacao Trading Co, Colombo
50 bls, Louis Furth, Colombo
CITRONELLA OIL—10 dms, Felton Chemical Co, Keelung
20 dms, Export Import Services, Keelung
30 dms, Ludwig Mueller, Keelung
45 dms, Lo Curto & Funk, Keelung
29 dms, Givaudan Corp, Tandjong Priok
5 dms, Internatio Rotterdam, Keelung
25 dms, Consumers Import Co, Keelung
COALTAR DYES—39 dms, Hensel Bruckmann & Lorbacher, Hamburg
3 dms, Rotterdam
COCONUT OIL—320 tons, Best Foods Inc, Manila
365 tons, American Trust Co, Manila
367 tons, Manila
CODLIVER OIL—50 dms, Dyson Shipping Co, Onundarfjorour
75 dms, Scandinavian Oil Co, Onundarfjorour
15 dms, Silmo Chemical Corp, Onundarfjorour
100 dms, Peder Devold Oil Co, Onundarfjorour
35 tons, Peder Devold Oil Co, Onundarfjorour
COPAL GUM—70 bkts, Internatio Rotterdam, Macassar
130 bkts, Wm H Scheel, Macassar
201 bkts, Archer Daniels Midland Co, Macassar
CRESYLIC ACID—718 dms, H A Gogarty, Liverpool
5,112 gals, H A Gogarty, Liverpool
CUTCH—500 bgs, American Extract Co, Tgmani
60 bgs, S B Penick & Co, Liverpool
CUTTLEFISH BONE—240 cs, Guaranty Trust Co, Kobe
475 cs, Venice
100 cs, Kobe
100 cs, Yokohama
34 cs, Bordeaux
DAMMAR GUM—322 bgs, Internatio Rotterdam, Surabaia
200 bgs, O G Innes Corp, Tandjong Priok
DEXTRIN—350 bgs, Rotterdam
EARTH COLORS—1,500 bgs, Naftone Inc, Bremen
113 bgs, T H Deutz, Leghorn
FISH OIL—174 dms, Peder Devold Oil Co, Hamburg
FISHLIVER OIL—5 dms, Consumers Import Co, Yokohama
FUEL OIL—357,131 bbls, Esso Export Corp, Las Piedras
215,000 bbls, Esso Standard Oil Co, Aruba
12,403 tons, Metropolitan Petroleum Corp, Point Fortin
172,000 bbls, Esso Export Corp, Aruba
10,000 bbls, Asiatic Petroleum Corp, Curacao
GALL—1 dm, Tupman Thurlow, Wellington
OX—3 dms, Van Gelder Fanto Corp, Hamburg
GELATIN—100 bgs, Royal Bank of Canada, Rotterdam
64 cks, Hensel Bruckmann & Lorbacher, Rotterdam
600 bgs, B Young & Co, London
524 bgs, Transatlantic Animal By-Products Corp, Rotterdam
222 bgs, Hensel Bruckmann & Lorbacher, Rotterdam
110 bgs, Chase Manhattan Bank, Hamburg
GERMANIUM OXIDE—59 cs, American Metal Co, Antwerp
GINGER—400 bgs, Otto Gerdau, Cochin
160 bgs, Lo Curto & Funk, Cochin
80 bgs, Louis Furth, Cochin
GLUE—261 bgs, Jung Forwarding Co, Liverpool
VEGETABLE—6 dms, Swift & Co, Havana
STOCK—542 bgs, Karr Ellis & Co, Liverpool
GLYCERINE—100 tons, International Packers Ltd, Buenos Aires
GRAPHITE—500 bgs, Asbury Graphite Mills, Colombo
250 bgs, Superior Graphite Co, Colombo
500 bgs, Asbury Graphite Mills, Hong Kong
GUAR GUM—400 bgs, Morningstar Nicol, Liverpool
400 bgs, Morningstar Nicol, Rotterdam
2,752 bgs, Stein Hall & Co, Calcutta
GURJON BALSAM OIL—5 dms, Dodge & Olcott, Singapore
GYPSUM—200 bgs, Whittaker Clark & Daniels, Liverpool
CRUDE—20,890 tons, U S Gypsum Co, Hantsport
HENNA LEAVES—220 bgs, Alexandria
HYDROFLUORIC ACID—34 dms, Lo Curto & Funk, Liverpool
ICHTHAMMOL—5 dms, Rohner Gehrig, Hamburg
INOKAWA OIL—6 dms, Norda Essential Oil & Chemical Co, Keelung
IRON BLUE—49 dms, Van Oppen & Co, Liverpool
IRON OXIDE—448 bgs, Landers Segal Color Co, Liverpool
1,000 bgs, Landers Segal Color Co, London
280 bgs, F L Kraemer, London
LACTOSE—100 bgs, Chas L Huisking & Co, Liverpool
125 dms, Chas L Huisking & Co, Liverpool
50 dms, Rotterdam
44 bgs, Rotterdam
LAURIC ACID—540 bgs, Procter & Gamble Co, Copenhagen
LAVENDER OIL, SPIKE—11 dms, L A Champon & Co, Barcelona
LEMON OIL—27 dms, Lo Curto & Funk, Vera Cruz
1 dm, George Uhe Co, Vera Cruz
LEMONGRASS OIL—30 dms, Van Ameringen Haebler, Cochin
18 dms, Cochin
LITHARGE—470 dms, Eagle Picher Co, Tampico
LIVERMEAL—1,120 bgs, Wessel Duval & Co, Timaru
1,033 bgs, C Hollinshed Co, Buenos Aires
LOCUST BEAN GUM—1,900 bgs, Morningstar Nicol, Piraeus
5 bgs, Stein Hall & Co, Genoa
600 bgs, Irving Trust Co, Barcelona
100 bgs, Heemsoth Kerner, Rotterdam
MACE—84 cs, Karl H Landes & E Balint, Macassar
20 cs, Chase Manhattan Bank, Rotterdam
MANGROVE EXTRACT—2,300 bgs, Saxe Cutch Corp, Sandakan
1,000 bgs, Saxe Cutch Corp, Singapore
MENTHOL—90 cs, Magnus Mabee & Reynard, Santos
20 cs, Daiichi Bussan Kaisha Ltd, Santos
MERCURIC CYANIDE—4 cs, George Uhe Co, Liverpool
MERCURY—50 flks, Cosmos Shipping Co, Trieste
13 flks, L H Keller Co, Tampico
950 flks, Cadiz
MONOCRESYL GLYCERYL ETHER—9 dms, American Cyanamid Co, Liverpool
MONOSODIUM GLUTAMATE—300 dms, Ajinomoto Co, of N Y, Yokohama
MUSTARD SEED—420 bgs, C Gulden, Copenhagen
480 bgs, C Gulden, London
100 bgs, Copenhagen
MYCOLINE—12 dms, Ayerst Lab, Liverpool
MYROBALANS EXTRACT—500 bgs, Barkey Importing Co, Liverpool
NICKEL SULFATE—10 dms, Liverpool
NICOTINE SULFATE—6 dms, Conray Products Co, Rotterdam
m-NITRO-p-TOLUIDINE—7 dms, A V Berner & Co, Liverpool
NUTMEG—66 bgs, J F Frank, Semarang
146 bgs, East India Trading Co, Macassar
81 bgs, Karl H Landes & E Balint, Macassar
65 bgs, Shippers Produce Corp, Macassar
243 bgs, Shippers Produce Corp, Padang
20 bgs, Kellys America Ltd, La Guaria
14 bgs, Rotterdam
OLIVE OIL—38 dms, Uddo & Taormina, Palermo
100 dms, Balbo Oil Corp, Casablanca
72 dms, Lionelli Packing Co, Sfax
97 dms, A Fiore & Co, Sfax
100 dms, Uddo & Taormina, Sfax
250 dms, Gem Packing Corp, Sfax
100 dms, P H Chipuroni, Sfax
24 dms, A M S Packing Co, Sfax
50 dms, Antonio Corrao Corp, Genoa
50 dms, R U Delapenha Co, Marseille
25 dms, Marseille
ORANGE OIL—3 cs, Port of Spain
PALMKERNEL OIL—92 dms, Rotterdam
PAPRIKA—300 bgs, H Marmorek & Son, Alicante
200 bgs, E E Bier, Alicante
100 bgs, A Burch, Alicante
100 bgs, A A Sayia, Alicante
200 bgs, P H Petry, Alicante
50 bgs, Cunningham Spice Co, Alicante
PEATMOSS—3,000 bls, New Amsterdam Import Co, Aarhus
1,000 bls, New Amsterdam Import Co, Bremen
2,167 bls, Premier Peatmoss Corp, Copenhagen
750 bls, E J Lang, Bremen
900 bls, Gardens Inc, Bremen
1,000 bls, Bruco Peatmoss Corp, Hamburg
3,650 bls, J E Bernard, Hamburg
500 bls, Premier Peatmoss Corp, Hamburg
1,000 bls, Ascot Peatmoss Corp, Hamburg
1,700 bls, Lewis Intern Co, Hamburg
1,230 bls, Premier Peatmoss Corp, Bremen
1,000 bls, E Dunwoody, Bremen
1,310 bls, Ascot Peatmoss Corp, Bremen
755 bls, Marine Midland Trust Co, Bremen
PEPPER, BLACK—420 bgs, Internatio Rotterdam, Singapore
80 bgs, Internatio Rotterdam, Alleppey
80 bgs, A G Dunn, Kozhikode
420 bgs, Volkart Bros, Cochin
240 bgs, Otto Gerdau, Cochin
160 bgs, Alleppey
80 bgs, Cochin
RED—600 bgs, Borneo Sumatra Trading Co, Yokohama
300 bgs, S L Jones & Co, Kobe
300 bgs, Hismoco American Co, Kobe
200 bgs, M J Golombeck, Kobe
WHITE—70 bgs, Mincing Trading Corp, Singapore
140 bgs, C M Van Sillevoldt, Singapore
70 bgs, A G Dunn, Singapore
12 bgs, Mincing Trading Corp, London
PETROLEUM, CRUDE—97,690 bbls, Metropolitan Petroleum Corp, Bachaquero
73,459 bbls, Gulf Oil Corp, Las Piedras
120,000 bbls, Socony Mobil Oil Co, Puerto La Cruz
110,750 bbls, American Oil Co, Las Piedras
102,187 bbls, Hess Inc, Maracaibo
POLLACKLIVER OIL—40 dms, J D Smith Interocean, Yokohama
50 dms, Mitsubishi International Corp, Yokohama
27 dms, Arista Oil Products Co, Yokohama
44 dms, Kanematsu N Y Inc, Beirut
POPPY SEED—100 bgs, P H Petry, Rotterdam
250 bgs, Rotterdam
POTASSIUM PERMANGANATE—26 dms, Henley & Co, Liverpool
PSYLLIUM SEED HUSKS—478 bgs, P H Petry, London
QUEBRACHO EXTRACT—1,539 bgs, River Plate Corp, Buenos Aires
1,090 bgs, First National Chicago, Buenos Aires
525 bgs, Buenos Aires
QUINIDINE SULFATE—6 dms, Lo Curto & Funk, Hamburg
RADIUM ELEMENT—3 cs, Radium Chemical Co, Antwerp
RHATANY ROOT—146 bgs, Brown Bros, Callao
RICE STARCH—312 bgs, Aurora Manufacturing Co, Trieste
ROSEMARY OIL—6 dms, Naples
ROSIN—10 dms, American Shipping Co, London
SAGE OIL—2 dms, L A Champon & Co, Barcelona
SANDALWOOD OIL—9 cs, Centflor Manufacturing Co, Cochin
5 cs, Van Ameringen Haebler, Cochin
SAPONINE—18 dms, Karr Ellis & Co, Liverpool
SABADILLA SEED—247 bgs, Prestiss Drug & Chemical Co, La Guaria
SEEDLAC—300 bgs, Wm Zinsser & Co, Calcutta
250 bgs, Kain Gwan Co, Bangkok
50 bgs, Haeuser Shellac Co, Bangkok
1,750 bgs, Wah Chank Corp, Bangkok
1,250 bgs, Bangkok
SESAME OIL—141 dms, Welch Holme & Clark Co, Copenhagen
SEED—110 bgs, J A Zaloon & Co, Beirut
SEED, HULLED—175 bgs, Beirut
SHELLAC—50 bgs, Mantrose Corp, Calcutta
25 bgs, Gillespie Rogers Pyatt, Calcutta
50 bgs, P N Rowe, Calcutta
100 bgs, C H Timm, Calcutta
175 bgs, Wm Diehl & Co, Calcutta
50 bgs, Mantrose Corp, Bremen
54 bgs, F H Paul & Stein Bros, Hamburg
27 dms, F H Paul & Stein Bros, Hamburg
227 bgs, I Levine, Hamburg
27 bgs, F H Paul & Stein Bros, Rotterdam
27 dms, F H Paul & Stein Bros, Rotterdam
SODIUM ALGINATE—10 dms, T M Duche & Sons, Glasgow
SODIUM ALUMINATE—50 dms, Chemical Manufacturing Co, Liverpool
100 bgs, Chemical Manufacturing Co, Liverpool
SODIUM ARSENATE—115 dms, Harry Dixon & Sons, Glasgow
SODIUM BICARBONATE—500 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CARBONATE MONOHYDRATE—90 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—1,318 dms, Chemical Manufacturing Co, Liverpool
SODIUM LAURYL SULFATE—50 dms, Aceto Chemical Co, Liverpool
SPERM OIL—284 tons, Pisco
279 tons, Glasgow
SULFATHIAZOLE—20 dms, American Roland Corp, Liverpool
SULFUR—25 cks, Chas L Huisking & Co, Liverpool
CRUDE—3,741 tons, Dixon Chemical & Research Inc, Coatzacoalcos
TALC—200 bgs, Whittaker Clark & Daniels, Bordeaux
TAPIOCA FLOUR—20,630 bgs, Morningstar Nicol, Bangkok
5,608 bgs, Stein Hall & Co, Bangkok
20 bgs, Wah Chang Corp, Bangkok
540 bgs, Geismar & Co, Bangkok
224 bgs, Manhattan Paste & Glue Co, Penang
1,040 bgs, Bangkok
400 bgs, Manhattan Paste & Glue Co, Penang
THEOPHYLLINE—10 dms, Industrial Chemical & Dye Co, Copenhagen
THIAMINE MONONITRATE—1 cs, Hanser Inc, Yokohama
THIOGLYCOLIC ACID—21 dms, Evans Chemitecs Inc, Copenhagen
THYME LEAVES—222 bgs, E E Bier, Alicante
TURMERIC—160 bgs, Mincing Trading Corp, Alleppey
80 bgs, S B Penick & Co, Alleppey
160 bgs, L E Ransom Co, Alleppey
240 bgs, Alleppey
160 bgs, Cochin
UREA, SYNTHETIC—3,000 bgs, Chemical Manufacturing Co, Liverpool
VALONIA CUPS—1,327 bgs, Barkey Importing Co, Izmir
VANILLA BEANS—2 cs, Norda Essential Oil & Chemical Co, London
69 cs, Thurston & Braidich, Vera Cruz
18 cs, Gillespie & Co, Semarang
WHITING—2,400 bgs, N H Weitzner, Antwerp
WOOL GREASE—54 dms, Chemical Bank, Genoa
100 dms, Hummel Chemical Co, Liverpool
42 dms, Chase Manhattan Bank, Kobe
13 cs, Hummel Chemical Co, Bremen
XYLENE—2 dms, Eastman Kodak Co, Bremen

Los Angeles

CARAWAY SEED—100 bgs, Beton Co, Amsterdam
COPRA—801 tons, Procter & Gamble Co, Cebu
CAKE—500 tons, American Trust Co, Tacloban
500 tons, American Trust Co, Surigao
500 tons, American Trust Co, Dumaguete
1,000 tons, American Trust Co, Ozamis
15,680 bgs, American Trust Co, Zamboanga
2,240 bgs, Balfour Guthrie, Iloilo
DEXTRIN—20 bgs, Stein Hall & Co, Amsterdam
EARTH COLORS—400 bgs, American Chemical Corp, Bremen
MAGNESITE—600 bgs, Smith Chemical & Color Co, Rotterdam
NAPHTHALENE—300 bgs, Carniege Chemical Corp, Amsterdam
PETROLEUM, CRUDE—27,875 tons, The Texas Co, Sungai Pakning
15,419 tons, Richfield Oil Co, Punta Cardon
POPPY SEED—75 bgs, Hismoco American Co, Rotterdam
100 bgs, B C Ireland, Rotterdam
SESAME SEED—150 bgs, Hismoco American Co, San Juan del Sur
100 bgs, B C Ireland, San Juan del Sur
50 bgs, R J Spitz, San Juan del Sur
50 bgs, W R Grace & Co, San Juan del Sur

Philadelphia

ASBESTOS FIBER—2,960 bgs, Chas Kurz Co, Lourenco Marques
700 bgs, Davies Turner, Durban
BONE—5,000 bgs, Knox Gelatine Co, Colombo
2,365 bgs, C G Trading Co, Colombo
1,145 bgs, Marine Midland Trust Co, Colombo
CASEIN—448 bgs, Melbourne
CHINA CLAY—3,267 tons, Fowey
GYPSUM—11,835 tons, National Gypsum Co, Halifax
LITHARGE—200 bgs, Vera Cruz
MOLASSES—700 tons, Southwestern Molasses Co, Hamburg
6,062,033 gals, Antilla
PEATMOSS—1,000 bls, E J Lang, Bremen
1,250 bls, E Hirsch Co, Bremen
750 bls, Vandergrift Co, Bremen
PETROLEUM, CRUDE—132,682 bbls, Atlantic Refining Co, Puerto La Cruz
102,323 bbls, Atlantic Refining Co, La Salina
134,017 bbls, Atlantic Refining Co, Pamatacual
240,511 bbls, Socony Mobil Oil Co, Covenas
249,429 bbls, The Texas Co, Puerto La Cruz
117,151 bbls, Atlantic Refining Co, Caripito
914,472 bbls, Gulf Oil Corp, Puerto La Cruz
PHOSPHATE ROCK—2,200 tons, H J Baker & Bro, Curacao
RAPESEED—330 bgs, Phila Seed Co, Rotterdam
VANILLA BEANS—62 cs, Camax Co, Vera Cruz
20 cs, Zink & Trieste, Vera Cruz
75 cs, Cristobal
WHITING—3,540 bgs, Antwerp

San Francisco

ARROW ROOT—112 tons, Morningstar Nicol, Belem-Para
BLEACHING POWDER—150 dms, C M C Chemicals, London
BONEMEAL—492 tons, Stauffer Chemical Co, Buenos Aires
CALCIUM FORMATE—300 bgs, C M C Chemicals, London
CARAWAY SEED—50 bgs, B C Ireland, Rotterdam
CORN STARCH—1,120 bgs, East Asiatic Co, Rotterdam
CURARE—5 tins, Callao
GINGER—31 bgs, London
PETROLEUM, CRUDE—124,601 bbls, Standard Oil Co, Vancouver
POPPY SEED—30 bgs, W R Grace & Co, Rotterdam
SODIUM NITRATE—3,226 bgs, Guaranty Trust Co, Tocopilla
SODIUM PERBORATE—15 dms, London
WHITING—2,000 bgs, Antwerp

Druggists Lag

—*Continued from page 4*

tribute literature and to get to know your customers."

Urging his audience not to stock "an enormous and confusing variety of old-fashioned nostrums," the Pfizer veterinary manager said health problems can be met with a "surprisingly small" number of potent drugs. Ninety percent of non-biologicals sold last year were broad-range antibiotics, he declared.

Cleaning house is half the battle, according to Mr. Gouraud. The other half is a three-part redecorating program to suit the farmer and his wife, who does most of the shopping for the flock: (1.) Display as much stock as possible as attractively as possible. (2.) Price tag each item clearly, and (3.) Show plenty of literature and be prepared to answer questions.

The speaker cited an Iowa drug store where animal products account for 25 percent of total volume. The animal health department was located near the prescription department. "There's no reason why you can't do as well," Mr. Gouraud said.

McKesson Will Make Drug Products in Iran

Products of McKesson & Robbins, Inc., will soon be manufactured in Iran under an arrangement just concluded with Hassan Khosrowshahi, Tehran, McKesson's import distributors in that country for the past six years.

The company said that this would be the first time that American drug products would be manufactured in Iran.

Corn States Presidency Goes to Joseph Marmon

Joseph E. Marmon has been elected president of Corn States Laboratories, Inc., Omaha, Neb., a wholly-owned subsidiary of Eli Lilly & Co., Indianapolis, Ind.

Forrest Teel, executive vice-president of Lilly, made the announcement following the annual meeting. He said that Mr. Marmon replaces Guy H. Williams, who has retired.

Other action taken at the annual meeting included the naming of Dr. J. A. Leighty, and Guy H. Williams, jr., to the board of directors. Dr. Leighty is executive director of scientific research at Lilly, and Mr. Williams is in charge of sales promotion for Corn States Laboratories.

Mr. Teel said that Corn States will soon begin installation of a new pharmaceutical production unit. "This will permit Corn States Laboratories to manufacture veterinary pharmaceutical products and develop items coming from the agricultural research division of Eli Lilly & Co.," he said.

Phenol Export Decline Is Seen by N. Y. Trader

A gradual decline in United States exports of phenol was predicted last week by George A. Abood, head of the New York importing firm bearing his name, in the course of an interview in which he also pointed out that Europe is rapidly becoming self-sufficient with respect to phenol.

Mr. Abood declared that US imports of phenol have been negligible since 1949. This was in contradiction to a statement reported in OPD in the issue of March 18. He pointed out that the Census Bureau has reported no imports of phenol in recent years and added that, in view of excess domestic production capacity, a stiff tariff rate and the fact that US exports have been in heavy volume, it was unlikely that imports would be more than negligible.

Current tariff rate for phenol was 3½ cents per pound plus 20 percent ad-valorem.

Phenol exports amounted to 18,928 metric tons during 1956, including 995 metric tons imported by West Germany. Exports were 16,639 metric tons in 1955 and 20,502 metric tons in 1954.

Mr. Abood reported that West Germany, the United Kingdom and France have already become virtually self-sufficient with respect to phenol. He declared that, with the coming on stream at this time of a new West German cumene process plant with annual capacity to produce 15,000 tons of phenol, the volume of phenol exports was bound to decline.

The Netherlands, Belgium and Scandinavian countries would continue to take a small amount of US material, he said; the Netherlands in particular. But he estimated that total US exports of phenol would taper off gradually to about 5,000 metric tons per year.

Exported phenol, he said, has commonly sold at a figure substantially below domestic prices. He reported, for instance, that in one recent year the average domestic price was 15 cents per pound, while the average price brought for exported phenol was computed at only 12 cents per pound.

Various producers have estimated that US production capacity for phenol was now about one-third in excess of current production (517,487,709 pounds in 1956, according to Tariff Commission data).

The Abood firm is a leading factor in imports of naphthalene, benzene and other aromatic organic chemicals from Europe.

'Orinase' Diabetes Drug

—Continued from page 5

betes—with no serious side reactions. Extenive clinical trials, which now include some 20,000 patients in Canada and the United States, have been in progress since November, 1955.

"Orinase" will be distributed by Hoechst Pharmaceuticals of Canada, Ltd., a recently formed firm jointly owned by Upjohn Company, Kalamazoo, Mich., and Farbwerke Hoechst, Frankfurt, Germany.

Chairman of the board of the new Canadian firm is Max Klee of Hoechst and president is Warren Miller, formerly a division sales manager of Upjohn Company. Other executives are: G. A. Prevost, vice-president for sales; Ralf Hoffmann, vice-president for finance; and James A. Leggatt, office manager—all of Montreal.

"Orinase" is produced and will be marketed in the United States by Upjohn Company under an exclusive license from Farbwerke Hoechst. Hoechst has made separate licensing arrangements in France and England, and has retained for itself the right to distribute the drug under the trade name Rastinon in other foreign markets.

Because of the proximity of Canada to the U. S. and the close relationship that exists between the medical professions in the two countries, arrangements have been made for the use of the Upjohn trademark, "Orinase," in Canada.

SPECIALISTS IN TECHNICAL SOAPS
AMMONIUM LINOLEATE
Carload quantities available
SODIUM SOAPS · ORGANIC AMINE SOAPS
AMMONIUM SOAPS · POTASSIUM SOAPS
Inquiries invited on all quantities
BEACON
Specialists in Technical Soaps
Chemical Industries, Inc.
37 RICHDALE AVE. CAMBRIDGE 40, MASS

HORMONES
DEHYDROCHOLIC ACID, N.F.
(Oral and Injectable Grades)
OX BILE USP
DRIED OX GALL POWDER
We invite your inquiries
GEDEON RICHTER
PHARMACEUTICAL PRODUCTS INC.
20 Exchange Place, New York 5, N.Y.

NOW OVER 5100 BIOS CHEMICALS
- PHENOLPHTHALEIN PHOSPHATE (SODIUM SALT)
- PHENOLTETRACHLOROPHTHALEIN
- PHENOLTHYMOLPHTHALEIN
- 9-PHENYLACRIDINE
- 2-PHENYLAZO-p-CRESOL
- p-PHENYLBENZALDEHYDE
- α-PHENYLGLUCOSIDE
- PHENYLINDANDIONE
- 2-PHENYLINDOLE
- PHENYLLACTIC ACID, dl
- PHENYLMERCURIC BORATE
- PHENYLMERCURIC LACTATE
- β-PHENYLSERINE
- PHENYLTHIENYL KETONE
- PHLOXIN
- PHOSPHOCHOLINE CHLORIDE (BARIUM SALT)

Ask for our new complete catalogue.
BIOS Laboratories, Inc.
17 West 60th St. New York 23, N.Y.
PLaza 7-8171

WALTER C. GREGORY CORPORATION
480 HENDERSON STREET, JERSEY CITY, NEW JERSEY SWarthmore 5-1010-1011
CUSTOM
GRINDING — CLEANING — MIXING — BLENDING — DRYING
GUMS ROOTS — SPICES — DRUGS — PHARMACEUTICALS

MC&B
packs under Argon
to assure higher purity
Where extreme purity is essential, specify MC&B organics — packed under Argon to *maintain* maximum purity.
Matheson Coleman & Bell
Division of the Matheson Company, Inc.
Norwood (Cincinnati), Ohio; East Rutherford, N. J.

BERYLLIUM • LANTHANUM • CERIUM
THORIUM and ZIRCONIUM SALTS • AMMONIUM BIFLUORIDE
TITANIUM POTASSIUM OXALATE
ABSORPTION BASE • CHLOROPHYLL • LANOLINE, U.S.P. • SAPONINE
BIOLOGICAL STAINS • ph BUFFER SOLUTIONS
"FIXANAL" CONCENTRATED PREPARATIONS FOR NORMAL SOLUTIONS
MOLDOL (Preservative)
SINCE 1900 Pfaltz & Bauer, Inc.
EMPIRE STATE BUILDING, NEW YORK

VITAMIN D-2 and D-3
Calciferol
Crystalline D_3 Crystalline D_3 Compound
Oil & Water Miscible (Mineral) Stable Powders
Dihydrotachysterol

PURE VEGETABLE EXTRACT COLORS
YELLOW — RED — ORANGE

BOWMAN YEAST PRODUCTS
Primary (Torulopsis utilis) Brewers' (Sacchromyces cerevisiae)
Powders — Flakes — Extracts — Concentrates — Hydrolysates
Vitab® B-Complex Extract

CHLOROPHYLL CAROTENE
PHYTOL XANTHOPHYLL
VIANOL®
Anti-Oxidant (BHT)

CHARLES BOWMAN & COMPANY
220 East 42nd Street, New York 17, N. Y.
600 South Michigan Avenue, Chicago 5, Ill.
130 Central Avenue, Holland, Mich.
170 East California Street, Pasadena 1, Calif.

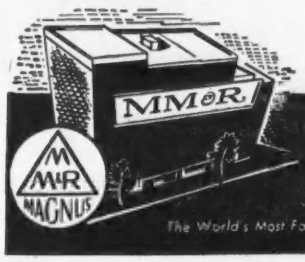
Since 1895

The MM&R Switchboard
— THE NERVE CENTER OF OUR BUSINESS

20 TRUNK LINES, 70 EXTENSIONS

There is always a friendly welcome in the voices of our telephone operators. They are anxious to give you the type of service to which you are entitled. That's as it should be. The switchboard is the nerve center of our business, our link with the most important people in our entire business life . . . our customers, who say:

"It's always a pleasure to call MM&R."



MAGNUS, MABEE & REYNARD, INC.
16 DESBROSSES STREET, NEW YORK 13, N. Y.
The World's Most Famous Supplier of Essential Oils, Basic Perfume Oils and Concentrated Flavors

OIL of PEPPERMINT
SPEARMINT
Of the Choicest Quality

☆

A. M. TODD COMPANY
KALAMAZOO, MICHIGAN

Florasynth
AEROSOL BOUQUETS & MASKING ODORS
for
INDUSTRIAL PURPOSES
LABORATORIES, INC.
900 VAN NEST AVE. NEW YORK 62, N. Y.
Chicago 6, Los Angeles 21 and other principal cities in the U. S., Canada and Mexico

ESSENTIAL OILS • PERFUME OILS • FLAVORS • AROMATIC CHEMICALS and ODOR MASKS
Proven Replacements For: BERGAMOT OIL, CITRONELLA OIL, ANISE OIL, CASSIA OIL
DOMESTIC EXPORT — YOUR INQUIRIES SOLICITED
D. W. HUTCHINSON & CO., INC., 700 South Columbus Ave., Mount Vernon, N. Y.
Founded 1896 — Telephone: Mount Vernon 4-7272

ESSENTIAL OILS • CONCENTRATED OILS • TERPENELESS OILS
PERFUME BASES • FLAVORING MATERIALS • AROMATIC CHEMICALS
DRY FLAVORS "FLAV-O-LOK"
Polak's Frutal Works, Inc. Middletown, New York
Represented in all principal cities. Branch Office Chicago, Illinois.

QUALITY EVALUATION CONCERNS BIG BUYERS

Today, large quantity, price-conscious buyers are concerning themselves more and more with precise specifications for all the raw materials they purchase. This, of course, is how essential oils should be bought because only on the basis of authentic characteristics can a true oil be correctly evaluated and properly priced. To such buyers, the name FRITZSCHE upon any product, is the best possible guarantee of dependable, fairly priced materials because it carries with it a reputation built for years upon close adherence to the most exacting quality standards.

FRITZSCHE Brothers, Inc. Established 1871
PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.
BRANCH OFFICES and *STOCKS: Atlanta, Georgia, Boston, Massachusetts, *Chicago, Illinois, Cincinnati, Ohio, *Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, St. Louis, Missouri, Montreal and *Toronto, Canada and *Mexico, D. F. FACTORY: Clifton, N. J.

Essential Oils, Aromatics

Major price shifts in this market last week occurred in the aromatic chemicals area where a number of materials declined primarily as the result of sinking conditions in the source material markets. Leading in the movement were cirtonellol, citronellyl and geraniol. In the essential oils market, movement was limited with a little strength being shown in the citrus oils; with lime oils showing enough to prompt suggestions of a price advance on spot. In seeds and spice the only activity of moment was the reversal in trend of nutmegs. Whether this movement was merely temporary or was a suggestion of true reversal of direction remains to be seen. However, it is the first time that brakes have been applied to the nutmeg market since the first of the year and it is assumed that there is significance to the action. Seasonal articles, including the citrus oils, vanilla derivatives and other hot weather material, are reportedly commanding good interest with inquiries moving heavily. Some oils and chemicals supplying the soap trade are quite active, including geranium oil and terpinyl acetate. Prices on the latter article were recently moved up to the basis of 62 cents to 64 cents per pound.

A March report from London this market noted that conditions in general remained quiet. Sandalwood oil, it was said, which had earlier been reported as reaching a high price, has fallen slightly in listing. French Guinea orange oil also fell slightly in price with the newcrop offered for less on forward shipments. Some of the ease in the market's position was attributed to national conditions and a pickup in the situation was anticipated this month.

Price Trends

Advanced
None

Reduced
Citronellol, 20c. per lb.
a-Ionone, 30c. per lb.
Methyl ionone, 30c. per lb.
Geraniol, 20c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
145.55	145.65	142.84	135.36

For Current Prices see Page 9

Essential Oils

Bois de Rose—Dealers noted no shifts in this market at all last week, it has been reported. The condition of the entire safrol bearing market has hobbled by lack of interest and an overabundance of material that was persisted for some long time. Attempts at source to stabilize this market have, according to overseas reports, borne fruit in certain limited areas of the market. However, the domestic scene and the world picture as a whole has remained unchanged with a strong tone of softness dominating the situation.

On spot the trouble hasn't lain with pepper so much as with the general apathy which has taken hold of spices and a number of other imported commodities and which affected even the stock market to a point. Whether one subscribes to those views or not, there is enough being talked and written about a levelling off of the business curve to produce indecision in some buyers and abstentions in others. This is obviously not the climate for spectacular developments, the dealer suggested. It looks, he noted, more like a continuation of the arid spell for a while until, somewhere along the line, depleted inventories at various levels may require sudden attention.

Lemongrass—A new chemical developed by a major producer as replacement for lemongrass in vitamins A, E, and K, may be the straw to break the camels back in this market, dealers here on spot suggested last week. The market has, for some time, been a slow moving area because of the heavy supply of material available in source, shipping and spot areas. Now, with this new development, the oil may sink even further into oblivion on the domestic scene. According to a report on the material by a leading scientist of the manufacturing concern, the starting materials for the process are acetone and acetylene. The ready availability and inexpensive nature of the starting materials makes the process commercially practical, it was said, and it was further noted that a multi-million dollar plant is now nearing completion which will make the producer completely independent of naturally occurring products of foreign import.

Lime—One report noted that though some sales of newcrop Mexican material have been made for May-June shipment, shippers are reportedly entertaining firmer price ideas and in some instances, it was suggested, are inclined to ask 50c. per pound more than previous prices paid for newcrop material.

World consumption of this material, according to a recent report, has been steadily increasing. British buyers, it was noted, have already contracted for the exportable surplus of oil produced in the West Indies. Because of a short crop it is generally believed that British buyers will endeavor to obtain additional lots of oil from Mexico. Newcrop West Indian oil will not be available until July. There was no carryover of stocks at primary markets.

According to a recent study, lime oil is the most important essential oil produced in Mexico. Nearly all the oil produced in that country is obtained by pressing the whole fruit and subsequent distillation; this alters the composition of the oil, as the acid juice transforms most of the citral into p-cymene, leaving the oil with a sharper flavor than is possessed by the cold press oil. However, consumers, the report noted, have acquired a taste for the flavor of the distilled oil, and annual production has recently been 80-120 tons as against about 10 tons of the cold pressed oil. There are various factors which have an influence on the quality of the distilled oil, one of the most important being the length of distillation, which ought to be 7 or 8 hours in order to obtain the rich characteristic flavor and remarkable stability; the flavor being due to high b.p. constituents and the stability likewise probably due to some natural anti-oxidant contained in these.

Neroli—A recent report from London noted that though it is too early to give an accurate forecast of the coming crop, a great many of the orange trees reported to have been killed by the frost last year are now showing signs of giving blossoms.

The report said that though the 1957 crop must necessarily be deficient, producers are of the opinion that there should be sufficient genuine neroli oil to satisfy normal requirements. No price has, of course, been fixed for the flowers, though it is almost certain that the price of neroli will be considerably lower than last year.

The listing on spot last year skyrocketed to a level of $450 per pound as the result of extremely heavy damage done during the late snowstorms of the winter and early spring.

Petitgrain—A researcher in a recent report on essential oils in the western hemisphere noted in his report that petitgrain oil is the principal export of Paraguay. This oil, the report went on, is distilled from the leaves of one particular tree: apepu-jhai (bittersweet) which is one of the many hybrids descended from the bitter and sweet oranges which were introduced by the Spaniards and went wild in the favorable climate and soil. Most of the oil is produced on small individual plantations of as little as one acre, being distilled in crude home-made stills which require lengthy distillation resulting in hydrolysis of the esters, the ester content being about 50 percent in such cases. On the other hand oils with an ester content as high as 90 percent have been produced on modern stills imported from France, used on a 5000 acre plantation some 50 miles east of Asuncion, where all orange trees other than apepu-jhai are scrupulously eliminated; here it would be possible to produce oil in 77 percent ester content all the year around. The drawback here is that the stills are of small capacity and heavy investment would be required for plant capable of more balanced operation; this would only be justifiable if buyers could be persuaded to take this high quality oil instead of the usual type, which so far they have been reluctant to do. Production of petitgrain oil depends entirely upon demand and the price on world markets.

Rose—Bulgarian Rose oil has maintained a relatively even keel over the past week, dealers here on spot reported with current listings resting about $40 per pound, thought shadings have been registered to as low as $38 per pound. The list-

Essential Oils

ing sprang upward radically last year on the heels of the mid-European political crisis but soon returned to the more normal level quoted above. No shift is anticipated in the near future.

Aromatic Chemicals

Citronellol—This material, soft in tone during the past months in keeping with the limited position of its source oil, followed the source material in progressively weakening price position last week with the second open decline of listing. The new quote, $3.70 per pound, is 20c. less than was previously quoted. Citronella source oil, the material upon which this aromatic chemical to a degree must depend, has shown its soft front since information of the heavy crop of Formosan material (major production area) was first received upon spot. The present condition is nothing new with over-production having been a problem for some time. At present, source authorities are attempting to curb the present situation but the earliest influence this move will have on either spot on shipping prices will be upon the introduction of next years crop into the spot scene. At present, tones remain soft and will in all likelihood continue and citronellol cannot possibly unbind itself from the source oil.

a-Ionone—This material declined in listing last week, dealers here reported. The new spot quotation, $4.85 per pound, is 30c. lower than the market price.

Methyl Ionone—This material was reduced simultaneously with that of alpha ionone. The new listing, $4.85 per pound is likewise a 30c. decline from the previous quote.

Citronellyl Acetate—This material along with citronellyl formate, and citronellyl propionate moved downward as the result of source material softening on both spot and shipping tones. The new listing for the acetate material is $3.75 per pound for material in 25 to 50 pound containers; $3.85 per pound for material in 5 to 10 pound containers and $4 per pound for material in unit containers.

The new quotes for citronella formate are: $5.05 per pound for material in 25 to 50 pound containers; $5.15 per pound for material in 5 to 10 pound containers and $5.30 per pound for material in unit containers.

Geraniol—All grades of this material slipped further on spot last week, a major producer announced last week. The easing movement was the second price shift in as many months, it was noted. Both times, prices shifted downward an average of 20c. per pound. The new listing for extra geraniol is $3.20 in 200 to 400 pound units; $3.25 in 25 to 50 pound units; $3.35 per pound in 5 to 10 pound containers and $3.50 for a pound. Standard geraniol is selling for $2.90 per pound in containers of 200 to 400 pounds; $2.95 in 25 to 50 pound units; $3.05 in 5 to 10 pound containers and $3.20 for a pound.

Geranyl Acetate—This material moved downward last week along with geraniol. Also slipping with it were geranyl butyrate, geranyl formate and geranyl propionate. The new listing for the acetate material is $2.90 per pound for material in 200 to 400 pound containers; $2.95 for material in 25 to 50 pound containers; $3.05 for material in 5 to 10 pound containers and $3.20 for one pound units.

Seeds and Spices

Last weeks prices, according to one dealer, were resultant of what appeared to be a more than superficial change in the market feeling. This change did not come about unexpectedly, it was noted, though it wasn't expected quite so soon. While it may not yet be considered the beginning of broad advance, it does seem to prove that the present general level favors the holding ability at the production end and that any extended withdrawal by buyers from the market will have to be made up by accelerated buying at some point.

All through the first part of the week, the dealers report said, steady cables testified to the unconcern abroad over the spot lack of interest. Replacements rose almost daily by one-eighth to one-quarter cent and the volume of offers actually dwindled. Consumer buying on Wednesday and Thursday coincided with a particularly meagre crop of cables resulting in the realization that spot and afloats were actually undervalued and represented attractive propositions. In addition, most early sales of spots and afloats were either in the nature of so-called "tired long liquidations" or were designed to keep the advance under control.

Cassia—Batavias and Korintjes have been slow and are fractionally lower. Shipment levels are not particularly weak, and in view of the heavy expenses involved in cleaning cassia today, one dealer suggested, current levels are reasonable. Stocks, it was also said, are being allowed to run down. The actions of this market over the past three months, the source, an importer suggested, has not encouraged importers to make sizable purchases abroad.

Gingers—Cochin attracted interest at the lower levels, and may have turned the corner. African and split nigerian are steady although quiet. Jamaica is slightly easier for shipment, but here too, the shipping season is drawing to a close.

Nutmegs—An improvement in the general demand has steadied prices here, and appear to have turned the market upward again. Aside from domestic interest, orders appeared in New York from Europe where there is a greater scarcity than on the spot in New York. Maces were inactive, and are quiet for the time being.

Vanilla Beans—Limited demand over the past weeks has brought the excessively

Natural Flower Products
Terpeneless Oils • Essential Oils
Perfume Compounds
Aromatic Chemicals
Flavoring Materials

Ungerer & Co.

CHICAGO BOSTON
PHILADELPHIA ST. LOUIS
LOS ANGELES ATLANTA

161 SIXTH AVENUE • NEW YORK 13, N.Y. Plant and Laboratories, TOTOWA, N. J.

HIGHEST QUALITY LEMON OIL
BEARS THE *PRODUCER'S* LABEL!

- Pure, unadulterated lemon oil . . . cold-pressed in California . . . and *packed by the producer* . . . has long provided the accepted standard for top quality and flavor.
- M.C.P. LEMON OIL is just such a product. Prepared for many years for distribution by others, M.C.P. LEMON OIL is now packed *under this experienced producer's own label.*
- Furthermore, all lemon oil packed under the M.C.P. label is *exclusively first grade lemon oil* . . . thus assuring the user receiving a product that is *unsurpassed* for flavor, purity, and highest quality.

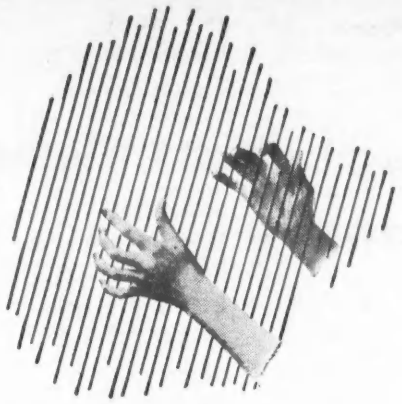
Produced and Packed by

MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

W. J. BUSH & CO., INC.
137 Boston Post Road, Cos Cob, Conn.



In Skillful Hands

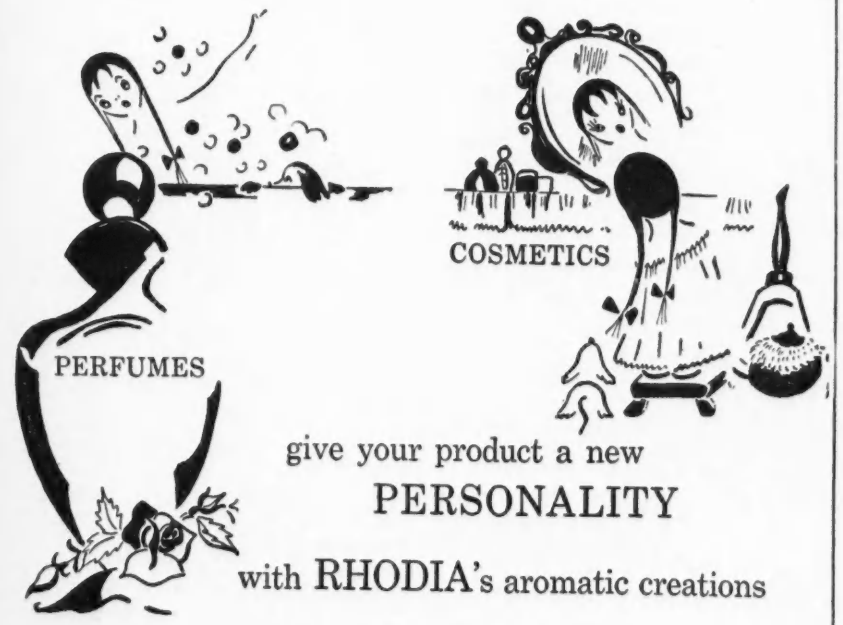
Behind the perfume on a lady's dressing table stand many skills, creative, artistic, technical and those that are the result of long experience and good judgment. Let the proven skills of van Ameringen-Haebler, Inc. serve your perfume needs.

van Ameringen • Haebler, Inc.

521 WEST 57th STREET • NEW YORK 19, NEW YORK

VAN AMERINGEN-HAEBLER, S.A.R.L.

147, RUE J. P. TIMBAUD • COURBEVOIE, SEINE, FRANCE



give your product a new
PERSONALITY
with RHODIA's aromatic creations

Rhodia
60 East 56th St.
New York 22, N.Y.

Essential Oils

high listing of this material down to more practical levels, dealers here on spot reported last week. Spot lots of Bourbon beans are currently listing at $8.50 to $9.25 per pound according to quality. The longer term outlook, according to one source, remains firm on the strength of information from Madagascar that noted that there are limited supplies there to fulfill requirements for the rest of this sales year.

Butter Substitute Imports Are Curtailed by President

Imports of butter oil and butter substitutes containing 45 percent or more butterfat will be limited to 1.8 million pounds this year, and to 1.2 million pounds in 1958 and subsequent years under a proclamation issued last week by President Eisenhower.

The quotas were established on recommendations of the Tariff Commission, which found that imports were threatening to interfere with the domestic price support program for dairy products.

Tidewater Starts Operating Solvent Extraction Facility

A solvent extraction plant has been placed in operation at Tidewater Oil Company's new Delaware Refinery.

Possessing a capacity of 40,300 barrels per day, the extraction plant is said to be the largest of its type ever built. The extraction plant operates in conjunction with a 45,000 barrel-per-day catalytic reformer.

Polio Vaccine

—Continued from page 4

mate objective; but that in communities where supplies are short, it is sensible public health practice to vaccinate those at greatest risk first.

The group suggested that preference be given, for the time being, to communities where vaccination programs are already organized and ready to start. They also recommended that commercial and public agency supplies be kept in balance so that persons can be assured of getting vaccine in physicians' offices.

Staff members from the regional offices of the Department of Health, Education, and Welfare who are working on polio programs were called into Washington on April 4 and 5 and given detailed instructions for collecting data on supply and demand at frequent intervals, Dr. Burney said. These data will be given to the vaccine producers to help them determine which areas have the greatest need for vaccine.

In summarizing the program at its two-year mark, Dr. Burney said that the incidence of polio so far this year is remaining well below the 1956 incidence. From January 1 to April 5, only 528 cases had been reported as compared to 1,067 for the comparable period last year.

Studies of vaccination reactions made by the poliomyelitis surveillance unit of the Public Health Service indicate that the polio vaccine seems to produce less after-effects (soreness, swelling, allergies, etc.) than many other immunizing agents. Effectiveness studies indicate that the vaccine gives about 75 percent protection.

To date states and territories have received $46.3 million of the $53.6 million in federal grants available to them under the poliomyelitis vaccination assistance act of 1955 and expect to spend the remainder before the act expires on June 30.

POLAK & SCHWARZ
INCORPORATED

667 WASHINGTON ST., NEW YORK 14, N. Y.

WEST COAST DIVISION, 3573 HAYDEN AVENUE
CULVER CITY, CALIFORNIA

CHICAGO, 5337 W. DIVERSEY AVENUE

- PERFUME SPECIALTIES
- FLAVORS
- AROMATIC CHEMICALS
- ESSENTIAL OILS
- COLORS

AFFILIATED COMPANIES:

BUENOS AIRES, ARGENTINA
VIENNA, AUSTRIA
BRUSSELS, BELGIUM
RIO DE JANEIRO, BRAZIL
TORONTO, CANADA
SANTIAGO, CHILE
ENFIELD, ENGLAND
BOIS-COLOMBES, FRANCE
EMMERICH, GERMANY
ZAANDAM, HOLLAND
JACARTA, INDONESIA
TEL AVIV, ISRAEL
MILAN, ITALY
OSLO, NORWAY
ROODEPOORT, SOUTH AFRICA
STOCKHOLM, SWEDEN
REINACH, SWITZERLAND

always a DEPENDABLE source of supply!

- Essential Oils
- Perfume Bases
- Aromatic Chemicals
- Flavors & Flavor Materials

FELTON
CHEMICAL COMPANY, INC.
599 Johnson Avenue, Brooklyn 37, N. Y.
Write for Samples

Atlanta
Boston
Brooklyn
Chicago
Cleveland
Los Angeles
Montreal
Philadelphia
St. Louis
Toronto
Versailles
France

ESSENTIAL OILS & FLAVORS
NATURAL FLORAL PRODUCTS
AROMATIC CHEMICALS

W. J. BUSH & CO., Inc.

137 BOSTON POST ROAD, COS COB, CONN.
TEL., GREENWICH 8-8363 OR DIAL WESTMORE 7-3424
FACTORIES: LINDEN, N.J. — 3525 E. Olympic Blvd., LOS ANGELES 23, CAL.
BRANCH OFFICE and WAREHOUSE: 605 W. Washington Blvd., CHICAGO 6, ILL.

Textile, Leather Chemicals

Activity in the textile and leather continued centered in withdrawals of materials against former contracts, while new business was confined to actual requirements. The feature of the tanning materials market was the scarcity of offers for shipment of all grades of valonia which were advanced drastically. Light production was reported sold up, chiefly for European delivery. This caused sellers to boost cups, $19 per ton; beards, $12 per ton, and extract, three-quarter cents per pound.

New crop high grade Brazilian tapioca was offered sparingly for shipment and closely held. Trading was reported light for June forward delivery. Potato starch was unchanged and steady. Demand, however, was restricted to immediate delivery. Other sizing materials and chemicals were quotably unchanged.

Shipments of rayon and acetate by domestic producers totaled 92,500,000 pounds in March, a slight increase over the 92,200,000 pounds shipped in the previous month, but 9 percent less than in the corresponding month of 1956, according to Textile Economics Bureau. March shipments included 89,900,000 pounds to domestic consumers and 2,600,000 pounds for export. By individual product, shipments of high tenacity rayon yarn in March were 8½ percent above the previous month, while regular+intermediate tenacity rayon yarn showed a gain of 4 percent and rayon staple+tow was up 2 percent. On the other hand, acetate filament yarn shipments in March were 19½ percent below the February level, and acetate staple+tow deliveries were off 7 percent.

Shipments of rayon and acetate in the first quarter of 1957 totaled 295,100,000 pounds, 8½ percent below the 323,300,000 pounds shipped in the first quarter 1953. Domestic shipments in the first quarter at 286,500,000 pounds were off 10 percent from January-March, 1956, while export shipments at 8,600,000 pounds showed a gain of 65 percent.

Price Trends

Advanced

Valonia beards, $12 per ton.
cups, $19 per ton.
extract, ¾c. per lb.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
107.44	105.32	105.33	107.37

For Current Prices See Page 9

Chemicals

Bichromates—Business was reported, chiefly for prompt delivery, while withdrawals against current contracts moved in good volume. Prices were unchanged and well held.

Sodium Acetate—Demand was moderate for actual needs. Prices were without change.

Sodium Hydrosulfite—Trading was confined to immediate delivery. Market was steady and quotably unchanged.

Sizing Materials

Albumin Egg—This market was steadier and moderate demand was noted at the recent sharp price decline. Flake was maintained at $1.28 to $1.30 per pound, spot and powder, $1.32 to $1.34 per pound, depending upon quantity. Production of technical grade was light and stocks on spot were well held at $1.08 to $1.10 per pound, as to quantity.

Egg production in March was indicated at 5,902 million, against 5,022 million in February and 5,776 million March last year. Total production amounted to 16,293 million, January-March inclusive compared with 16,096 million during the same period last year.

Corn Dextrin—While demand was restricted to prompt needs, the market remained unchanged and steady. Gum was quoted at $9.33 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.07; dark canary, $9.17 and white, $8.91, same basis. Smaller lots were 15c. higher.

Corn Starch—Consumers absorbed moderate lots for actual needs. Prices were maintained at former levels. Pearl was quoted at $7.32 per 100 pounds, paper bags, carlots, New York basis and powder, $7.44, same basis. Less carlots were 15c. higher. Visible corn supply increased 5,832,000 bushels to 115,801,000 bushels for the week ended April 12, compared with 57,547,000 for the same time last year, according to Chicago Board of Trade. Stocks on farms on April 1 were placed at 1,615,149,000 bushels by the Department of Agriculture, against 1,494,102,000 a year ago and 1,319,022,000, in 1946-55 average.

Egg Yolk—This market was unchanged and steady. Demand was reported fair. Stocks on spot were held at $1.01 to $1.03 per pound, as to quantity.

Potato Starch—Demand was fairly active, chiefly for small lots for immediate delivery. Stocks on spot were maintained at 8¼c. to 9¼c. per pound, exwarehouse, according to quantity. Carlots were well held at 6¼c. per pound, mills, Maine, less ¼c. for delivery to the West and South. Idaho market also was steady at 6½c., carlots, mills, and ½c. less for shipment west of the Rockies.

Production of winter and early spring potatoes was estimated at 10,759,000-100 pounds, against 9,282,000 last year and 10-year average of 6,664,000.

Sago Flour — Business was reported light and confined to actual needs. Stocks on spot were unchanged. Raw ranged from 7c. to 7½c. per pound, and refined, 8¼c. to 8¾c., exwarehouse, depending upon quantity. Prompt shipment was quoted at 5.45c. to 5¾c., exdock, according to quality.

Tapioca Flour—Offers of new crop high grade Brazilian flour continued light and quoted at 9¼c. per pound, carlots, exdock, June forward delivery. Limited trading was reported at this level. Small lots on spot were held at 12½c. to 13½c. per pound, exwarehouse, as to quantity and seller. Medium Siamese flour ranged from 5½c. to 5.9c. per pound, carlots, exdock, for prompt shipment, as to quality.

Tanning Materials

Cattle hide and kip side leathers production was smaller in February and totaled 2,162,000 hides and kips, compared with 2,254,000 in January, it was reported by Tanners Council. Calf and whole kip skins output amounted to 848,000 in February, against 872,000 in January; goat and kid skins, [illegible] against 2,064,000 and sheep and lamb skins, 2,225,000 against 2,065,000, respectively.

Chestnut Extract—Trading was spotty and restricted to nearby shipment. Prices were without change and well held. Solid extract, 60 percent tannin was maintained at 8½c. per pound, exdock, plus duty, prompt shipment, and 68 percent, 9.59c., same basis.

Cutch—Consuming inquiry was fairly active. Shipments were unchanged at 8c. per pound, exdock, plus duty, June forward delivery.

Myrobalans — Consuming interest was still light. Primary market was unchanged. Genuine J1 was quoted at $64 per ton, exdock, prompt shipment; Bombay at $57 per ton and crushed at $79 to $80 same basis.

Quebracho Extract—Buying interest was confined to nearby shipment. Prices were unchanged and well held. Solid clarified was held at 10.7429c. per pound, and ordinary, 9.8035c. per pound, carlots, exdock, plus duty for prompt shipment.

Valonia—This market was stronger and sharply higher as a result of small production and increased demand for European account. Offers for shipment were scarce. Cups were nominal and boosted to $83 per ton, exdock, and beards to $98 per ton, same basis. Extract also was higher and nominal at 10½c. per pound, exdock, plus duty.

Wattle—Trading was reported slow. Primary market was unchanged and steady. Fair average bark was quoted at $80 per ton, exdock, prompt shipment, merchantable, $75 per ton, same basis. East African extract, 60 percent was quoted at 8.275c. per pound, exdock, plus duty and South African, 8.4c. per pound, same basis.

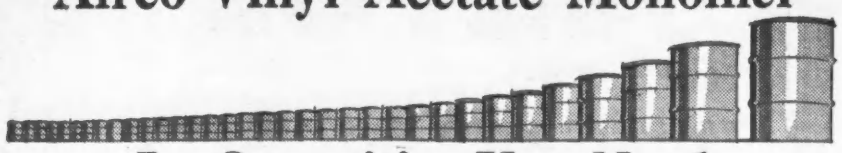
METOL
Monomethylparaminophenol Sulfate
Registered Trade Mark
TANNIC ACID GALLIC ACID
(U.S.P. and Technical Grades)
PYROGALLIC ACID
(U.S.P. and Technical Grades)
ZINSSER & COMPANY, INC.
SUBSIDIARY OF
THE HARSHAW CHEMICAL CO.
HASTINGS-ON-HUDSON, NEW YORK
Cleveland • Chicago • Cincinnati • Detroit • Houston • Los Angeles • Philadelphia • Pittsburgh

DRY COLORS — DYESTUFFS
IMPORT EXPORT
FEZANDIE & SPERRLE 205 Fulton Street NEW YORK 7
Telephones: COrtlandt 7-1460-1461 Cable Address: "Fezan," N. Y.

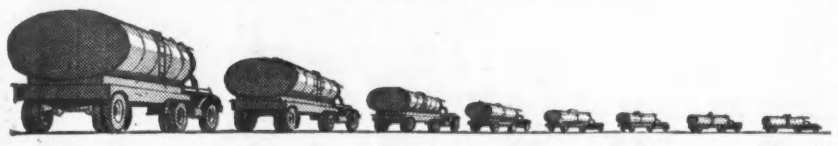
Get it First.....
Get it All.....
Get it Straight.....
.....in OPD

INDUSTRIAL CHEMICALS
Phibro
for textile specialties
DIETHYLENE & ETHYLENE GLYCOLS
CAUSTIC POTASH & SODA
CARBONATE OF POTASH
ZINC SULPHATE • ZINC CHLORIDE
ACETIC ACID • ALL PHOSPHATES
SODIUM CYANIDE
MONOETHANOLAMINE
DIETHANOLAMINE
TRIETHANOLAMINE
PHOSPHOROUS TRICHLORIDE
ETHYLENE DIAMINE
Tank Wagons, Tank Cars, Carloads and Less Carloads, Drums, Barrels, Bags.
PORTLAND, CONN.
PROVIDENCE 3, R. I.
PHILADELPHIA 6, PA.
CHICAGO 1, ILL.
BALTIMORE 1, MD.
BOSTON 10, MASS.
Philipp Brothers Chemicals, Inc.
COLISEUM TOWER BUILDING
10 COLUMBUS CIRCLE · NEW YORK 19, N. Y. · JU 6-6020
Cable Address: PHIBROCHEM NEW YORK

Airco Vinyl Acetate Monomer



In Quantities You Need



Delivered the Way You Want It

When You Want It

WRITE: Dept. OD, PHONE: MUrray Hill 2-6700, Ext. 334

AIRCO ® AIR REDUCTION CHEMICAL COMPANY

A division of Air Reduction Company, Incorporated
150 East 42nd Street, New York 17, N. Y.
Represented Internationally by Airco Company International

STANLEY DOGGETT, Inc.
ESTABLISHED 1878
MANUFACTURERS and IMPORTERS
DRY COLORS OF MERIT QUALITY PIGMENTS
99 HUDSON STREET, NEW YORK 13, N. Y.

versatile
versamid
polyamide resins

THERMOSETTING TYPES

For protective coatings, potting and casting, laminates, adhesives

THERMOPLASTIC TYPES

For paper coatings, heat seal adhesives, thixotropic paint, printing inks

Also Organic Solvent Solutions and Water Dispersions

Versamids are non-toxic epoxy curing agents

CHEMICAL DIVISION General Mills
KANKAKEE, ILLINOIS
Producers of Fatty Acids • Fatty Methyl Esters • Fatty Nitrogens • Sterols

Coatings Materials

There has been no verification of the rumor that dioctyl phthalate prices might be due for an official 1c. per pound reduction. Producers who were questioned on the matter last week expressed their intention to hold the line at 28c. per pound until further notice. Thus, while buyers continue to watch the market closely because of the well known fluidity of the dioctyl price structure, there is no longer a firm expectation of an official reduction.

The market for aluminum pigments took on a sharply competitive aspect last week when one of the major suppliers posted a 3c. per pound cut in the price of standard paste. Other firms immediately matched the price on an unofficial basis—without issuing revised price listings. As a result, the price most generally quoted now on standard paste in drums is 45c. per pound, as against a previous quote of 48c.

A similar situation started to develop in the lead pigment market, with the difference that as yet major firms have not matched the recently posted reduction. Consequently there are now price spreads of ¼c. per pound in litharge and ¾c. per pound in red lead. This makes for an unsteady market, with prices apt to settle in either direction, producers pointed out.

While related pigments were showing a shaky tone, titanium dioxide continued to hold firmly at its recently advanced price level. Because of increased production costs and existence of a rather close supply balance, producers have had no trouble maintaining the advance, market sources report.

Although it may be some time before action is taken on the tariff legislation currently pending in congress, casein buyers are said to be avoiding heavy commitments or speculative buying because of the advantages that would result from passage of the bills. There are three bills under discussion that would grant various degrees of tariff relief, including one bill that would abolish the duty completely. Trade opinion on the legislative prospects of these bills appears to be about evenly divided between those who expect passage and those who think the bills will be killed.

Price Trends

Advanced
None

Reduced
Aluminum paste, standard, 3c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
100.76	100.77	100.79	100.08

For Current Prices see Page 9

Prime Pigments

Aluminum Pigments—This market became sharply competitive last week when one of the major suppliers announced a 3c. per pound cut in standard aluminum paste. Other factors in the field immediately began matching the price on an unofficial basis—without issuing revised price listings. There has been no word of similar action on powder or extra-fine paste. The quotation most generally heard now for standard paste in drums is 45c. per pound, as against a previous quote of 48c. per pound.

Unchanged prices of powder are $1.09 for extra-fine and 78½c. for standard. Extra-fine paste is still 68c.

Antimony Oxide—Over the past year or two sales in this market have drifted to a lower level because of the ground gained by newer pigments. Reports of the last few months indicate that business volume has steadied at the lower pace. When the downtrend became evident last year, producers moved quotations down a notch and have since held them steady. Supply is ample for all trade needs.

Cadmium Colors—Although mercury-derived materials have made substantial inroads into the cadmium lithopone market, there are apparently a number of manufacturing processes for which producers find cadmium-selenide lithopones preferable despite the higher prices. Incidentally, when selenium metal improved in supply a while back, producers were able to post a substantial reduction in prices of the selenides, thereby making them more competiive in the lithopone market. There should be no recurrence of the selenium shortage since that material has been replaced by other metals in manufacture of electronic rectifiers, previously one of its major outlets.

Cobal Oxide—This is another material for which lower prices have been posted in order to stimulate a broader market. This was made possible last December when mining companies in the Belgian congo reported substantial new deposits of ore. Producers immediately slashed prices of cobalt and cobalt oxide. A few weeks later the various cobalt driers were proportionally lowered in price.

Lead Pigments—A year of price steadiness came to an end in this market recently when a producer of lead pigments announced price reductions amounting to ¼c. per pound in litharge and ¾c. to 1c. per pound in red lead. Other producers have taken no action on the matter yet. The highly competitive situation that has resulted is being watched with interest by observers.

As a result of the price reduction, the following ranges are now in effect:—Litharge, 17¾c. to 18c. per pound; red lead, 95 percent, carlots, 18¼c. to 19c. per pound; less than carlots, 19¼c. to 20¼c. per pound; 97 percent, carlots, 18.45c. to 19.20c. per pound; and less than carlots, 19.45c. to 20.20c. per pound.

Titanium Dioxide—Because of increased production costs and existence of a rather close supply balance, producers have had no trouble maintaining the recent 1c. per pound price advance, market sources report. The period of grace that was accorded regular customers when the increase was announced has expired, so that all material is now moving at the higher price level. Supply has never been overly abundant in this market, but with several new plants having started production during the past year, supply levels are now sufficient to take care of all normal trade requirements.

Lacquer Materials

There has been no substantiation of the rumor reported here last week that dioctyl prices might be due for an official 1c. per pound reduction. A number of producers were questioned on the matter and all expressed their intention to hold the line at 28c. until further notice. Thus, while buyers continue to watch the market closely because of the well known fluidity of the price structure, there is no longer a firm expectation that an official reduction will be posted.

On the basis of cumulative totals for 1956, the decline in TCP production that was reported from month to month last year appears to have been mainly an adjustment to compensate for previous overproduction. At 31,660,000 pounds, output during the year as a whole was actually greater than 1955 production of 28,352,735 pounds. No doubt anticipating a greater

Coatings, Shipments, Output: February

	Factory shipments Dollars		*Reported production Gallons*	
	February	*January*	*February*	*January*
Trade sales	$62,336,000	$70,862,000	23,785,000	21,025,000
Industrial sales, total	50,131,000	54,539,000	18,530,000	21,182,000
Paint and varnish	36,865,000	40,452,000	13,762,000	15,824,000
Lacquer	13,266,000	14,087,000	4,768,000	5,358,000
Overall totals	$112,467,000	$125,401,000	*42,731,000	*42,669,000

Total sales, January and February: $237,868,000.

* Detail does not add to total because some respondents reported only total production without indicating allocation as to trade or industrial sales.

market expansion than that which finally occurred, producers increased production drastically in the early months of 1956. For instance, output in the first month of 1956 totaled 3,758,778 pounds, as compared with 2,280,824 pounds in December, 1955. Later, production was cut back sharply to allow this heavy supply accumulation to move. Last December output was again over 2 million pounds (2,034,934) but in January of this year producers cautiously held output to only 1,762,756 pounds to avoid a repetition of last year's oversupply.

The latest development in the TCP market was the 2½c. price reduction posted by producers a few months ago. It was conceded that the purpose of this price slash was to assure TCP an even break in its competition with the various phthalates.

In contrast to these materials, sebacates and other plasticizers have shown a steady tone. Sebacates, adipates and citrates are all unchanged in price at long-established levels. Citrate supplies are usually in good balance with an expanding market. Quotations are steady, with a firm undertone contributed by higher raw materials costs.

Natural Resins

Gum—Prices of a broad line of natural gums were jostled back and forth recently by supply fluctuations at the source, but when the smoke cleared, quotations were found to be unchanged except for fractional increases that were tacked on to compensate for the fifteen percent hike in freight rates. Since then prices have held about steady.

A dealer here has reported a gradual shift toward emphasis on short term buying. In his opinion, this means that consumers prefer to take a gamble on price increases rather than make firm buying commitments during a time when the economy is poised on dead center without any sign as to its future direction. In actual sales volume of gum there is no notable change, since the same amount of material is sold whether on a day to day basis or through large contract shipments. The one difference pointed out by this dealer is that it is now necessary for the seller to keep a broader and fuller inventory in order to keep up with daily fluctuations in demand.

Miscellaneous

Casein—Argentine casein is moving to consumers in moderate volume for prompt requirements. Although final action on the tariff bills currently before congress may be delayed for some time, consumers are said to be avoiding heavy commitments or speculative buying because of the advantage that would result from passage of the bills.

There are currently three bills being discussed in committee. As described by a dealer here, one would eliminate the casein tariff entirely, another would lower it substantially, while a third would suspend the duty for a trial period of one year. Sources in the trade have expressed varied opinions on the future of this legislation. Those favoring elimination of the tariff have a good argument in the fact that domestic production has been on the decline for a number of years despite the duty on imports.

Naval Stores

Pine Gum—For the week ended April 6, the average price per barrel of crude pine gum was reported at $25.52, as compared with $25.49 during the previous week and $27.19 a year ago. The volume of gum deliveries to plants was 5,800 barrels, as against 4,103 barrels the previous week and 5,854 barrels a year ago. Average per barrel content was 10.88 gallons or turpentine and 298.1 pounds of rosin. Gum grading percentages were as follows:—WW, 5; WG, 18; N, 30; M, 34; and K and below, 13.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Apr. 12	Mon. Apr. 15	Tues. Apr. 16	Wed. Apr. 17	Thur. Apr. 18
Drums—					
H	...	...	$7.45	...	...
I	...	...	...	$7.48	...
K	...	...	...	...	$7.50
M	$7.50	...	7.50	7.49§	7.50
N	...	...	...	...	7.50
WG	...	$8.27	8.40	...	8.10
WW	...	8.70	8.41§	...	8.37
Bags—					
K	...	...	7.74	...	...
M	...	7.30	7.30	7.30	...
WG	...	8.02	8.00	...	...
WW	...	8.25§	8.25	...	...

Tankcars (for week ended April 12)—M or better, $7.15; K or better, $7.51

Sales, USDA

850* 1,000* 1,094* 1,003* 2,626*

New York

(Per 100 lbs., c.l., Friday)

WW, $10.30; WG, $9.90; N, $9.25; B through M, $9.00

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	.5775	.5725	...	...
Sales	8,000¶	16,000¶	...	...

New York, Friday, per gal. 7 lbs., tankcars, 66c., l.c.l., 82c.

* Drums equivalent. ¶ Gallons. § Average price.

GOOD USED EQUIPMENT

Podbielniak SS Centr. Extractor.
Peerless SS Pumps with XP Motors.
Kinney DVD Vacuum Pump, 10 H.P.
I.R. Pump, SS, with 15 HP XP Motor.
Top Entry 2 Speed Mixer, 2" Shaft TEFC 2 2/3 HP Motor, w/switch.
Pebble Mill, 6x5, Jacket, 20 HP.
Large stock of Paint and Chemical Equipment including Mills, Filters, Plain and SS Tanks, Mixers, XP Lights, Switches and General Factory Supplies.

TO BUY OR SELL—TRY

General Equipment & Trading Co.
2633 W Grand Ave. Chicago 12, Ill.
Phone: ARmitage 6-8050

WATER GROUND MICA FOR PAINTS
"SILVERSHEEN SPECIAL" 325 MESH

RICHMOND MICA CORP.
NEWPORT NEWS, VA. 62 WORTH ST., NEW YORK 13, N. Y.
Canada: P. N. Soden & Co., Ltd., 2143 St. Patrick Street, Montreal 22, Canada

REGULAR • COATED • PELLETIZED • GRANULAR

ST. JOSEPH LEAD CO. ST. JOE ZINC OXIDE JOSEPHTOWN, PA. Lead-Free

ZINC OXIDE

Make Note of Our Nearest Distributor and Call on him for Prompt Service

ST. JOSEPH LEAD COMPANY, 250 Park Ave., New York 17, N.Y.

AKRON, O. — Harwick Standard Chemical Co., 60 S. Seiberling St.
ALBERTVILLE, ALA. — Harwick Standard Chemical Co.
ATLANTA, GA. — Southern States Chemical Co., 1061 W. Marietta St., N. W.
BALTIMORE, MD.—William McGill, 237 President St.
BOSTON, MASS.—Harwick Standard Chemical Co. of Mass., Inc., 661 Boylston St.
BUFFALO, N.Y.—James O. Meyers' Sons, 290 Larkin St.
CHARLOTTE, N.C.—Southern States Chemical Co., 1039 Bond St.
CHICAGO, ILL.—Fred A. Jensen & Associates, 510 N. Dearborn St.
CINCINNATI, O.—C. L. Zimmerman Co., N. 303 Cincinnati Union Terminal
CONSHOHOCKEN, PA.—Van Horn, Metz & Co., Inc., 241 E. Elm St.
DALLAS, TEX. — Thompson-Hayward Chemical Co., P. O. Box 6226
DETROIT, MICH. — Matteson - Van Wey, Inc., 403 Baltimore Ave. W.
GREENVILLE, S.C.—Southern States Chemical Co., 25 Peden St.
HOUSTON, TEX.—Thompson-Hayward Chemical Co., P. O. Box 4557
INDIANAPOLIS, IND.—Meyer Materials, Inc., 5305 No. Keystone
KANSAS CITY, MO. — Thompson-Hayward Chemical Co., 2915 Southwest Blvd.
LONG ISLAND CITY, N.Y. — C. Withington Co., Inc., 47-40 Fifth Street (paint industry only)
LOS ANGELES, CAL. — Harwick Standard Chemical Co., of Cal., 1248 Wholesale St.
MEMPHIS, TENN.—Thompson-Hayward Chemical Co., 493 N. Front St.
MONACA (PITTSBURGH), PA. — R. L. Weaton, c/o St. Joseph Lead Co.
NORTH LITTLE ROCK, ARK. — Thompson-Hayward Chemical Co., P. O. Box 413
OKLAHOMA CITY, OKLA.—Thompson-Hayward Chemical Co., 828 W. Second St.
OMAHA, NEB. — Thompson-Hayward Chemical Co., 1110 S. Fourth St.
PORTLAND, ORE.—Cordano Chemical Co., 56 S. E. Belmont St.
ST. LOUIS, MO.—J. E. Niehaus & Co., Inc., 3419-21 Gratiot St.
ST. PAUL, MINN.—George C. Brandt, Inc., 760 Vandalia St.
SAN ANTONIO, TEX. — Thompson-Hayward Chemical Co., 222 Seguin St.
SAN FRANCISCO, CAL. — L. H. Butcher Co., 15th & Vermont St.
SEATTLE, WASH. — Great Western Chemical Co., 1242 Sixth Ave., So.
TRENTON, N.J.—R. E. Carroll, Inc., P. O. Box 139
TULSA, OKLA. — Thompson-Hayward Chemical Co., 36 N. Guthrie
WICHITA, KAN.—Thompson-Hayward Chemical Co., 727 E. Osie
CANADA:
MONTREAL, QUE. — Pigment & Chemical Co., Ltd., Room 20, 6333 Decarie Blvd.
TORONTO, ONT.—Pigment & Chemical Co., Ltd., 137 Wellington St. W.

CELLULOSE ACETATE
CELLULOSE ACETATE BUTYRATE
Eastman
CHEMICAL PRODUCTS, INC.
subsidiary of Eastman Kodak Company
KINGSPORT, TENNESSEE

Put Grace Urea in your picture!

From television cabinets to wet-strength paper, this basic, versatile chemical has applications in...
RESINS • PHARMACEUTICALS
FERTILIZERS • CHEMICALS
PLASTICS
AND MANY OTHER FIELDS

GRACE...a major source...has "A WORLD OF EXPERIENCE" in producing urea of uniform purity and quality...

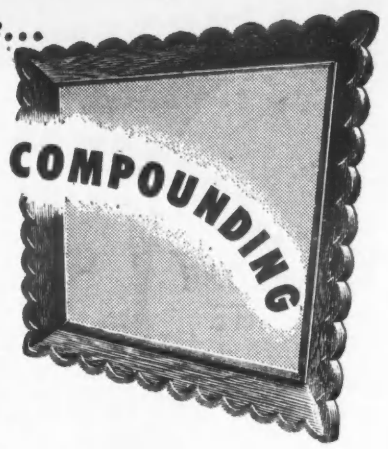
Write for samples, specifications and further information.

Grace Chemical Company
A DIVISION OF W. R. GRACE AND COMPANY
MEMPHIS, TENN.

SALES OFFICES:
Edway Building, Memphis, Tenn., Phone: JAckson 7-1551 • New York • District Office, 3 Hanover Square, Phone: Digby 4-1200 • Chicago District Office, 75 E. Wacker Drive, Phone: FRanklin 2-6424 • Tampa District Office, 2901 Alline Avenue, Phone: 63-4121.

Fits into your picture...

ALLIED UNIFORM COMPOUNDING



PRECISION in formulation and compounding of Gilsonite, Pitches and Waxes to the specifications of protective coating manufacturers has been the core of Allied Service for a quarter of a century. Our customers have come to depend upon the uniformity of each compound, made possible by our skilled technicians of long experience.

PITCH COMPOUNDS

OIL EXTENDERS
Black paints • Varnishes
Baking enamels • Industrial paints
Protective coatings • Drying oil pitches
Various blends—processed to definite specifications and melting points.

GILSONITE

ALLIED SUPER SELECTS—Melting point 270°-280° F. Low viscosity, uniform, clean.

FINES—Obtained from Super Selects Ore. M.P. 270°-280° F.

ALLIED E.B. ORE—Melting point 320°-330° F. Medium to high viscosity, uniform, clean.

WAXES

Ozokerite • Ceresine • All types for special uses formulated to order

Wherever Pitches, Gilsonite and Waxes fit into your product picture, call on the Allied agent nearest you.

Allied Asphalt & Mineral Corp.

ESTABLISHED IN 1925
217 BROADWAY, NEW YORK 7 • FACTORY: DUNELLEN, N. J.

AGENTS AND WAREHOUSE STOCKS IN PRINCIPAL CENTERS

ATLANTA — Deeks & Co.
BALTIMORE — Warner Graham Co.
BOSTON — Mulcahy & Griffin
CHICAGO — Phillip E. Cale Co.
CINCINNATI — Deeks & Co.
CLEVELAND — Norman G. Schabel Co.
DETROIT — D. H. Osgood Co.
HOUSTON — Joe Caulsen Co.
KANSAS CITY — John T. Kennedy Sales Co.
LOS ANGELES — E. B. Taylor Co.
LOUISVILLE — Deeks & Co.
MONTREAL, CAN. — Wm. J. Michaud Co., Ltd.
NEW ORLEANS — Russell Chemical Co.
PHILADELPHIA — Loss & Dilworth, Inc.
PITTSBURGH — B. Ostroff
PORTLAND, ORE — Great Western Chem. Co.
ST. LOUIS — Harry G. Knapp
SAN FRANCISCO — E. M. Walls
SEATTLE — Great Western Chem. Co.
TAMPA, FLORIDA — A. J. Passonno Company
TORONTO, CAN. — A. S. Paterson

PLYMOUTH BOARD

Where Uniformity Is An Achievement

STEARATES

ZINC STEARATE
ALUMINUM STEARATE
CALCIUM STEARATE
BARIUM STEARATE
MAGNESIUM STEARATE

Try stearates in your product. While Stearates are used extensively for Pharmaceuticals, Cosmetics, Rubber, Paints, Varnishes, Lacquers, Plastics, Lubricating Greases, Inks, Waterproofing, Conditioners and Ceramics . . . there are specialized uses, increasing every day, where they are utilized to great advantage. Investigate. Write for samples and data. Technical service available.

Technical Service Available • Send for Samples and Data

M. W. PARSONS-PLYMOUTH, INC.

GENERAL OFFICES 59 BEEKMAN STREET, NEW YORK, N. Y. FACTORY BUSH TERMINAL BUILDINGS, BROOKLYN, N. Y.
DISTRIBUTION POINTS AND AGENTS IN ALL PRINCIPAL CITIES

Oils, Fats Output, Use: February

Statistics on production and consumption of oils, and fats, including primary and secondary products have been compiled by the Bureau of Census, Department of Commerce, for the month of February. The data are as follows:—

Primary Products

	Pounds		
	Production	Consumption	Stocks Feb. 28
Babassu oil, crude	.....	.....	[1].....
Refined	.....	.....	.....
Castor oil, No. 1, crude, and No. 3, crude	1,145,000	11,863,000	[2]18,341,000
Coconut oil, crude	31,114,000	46,602,000	[2]62,803,000
Refined	29,902,000	31,098,000	10,440,000
Cod and codliver oil[3]	.....	N.A.	1,173,000
Corn oil, crude	21,441,000	22,066,000	11,376,000
Refined	20,568,000	19,171,000	8,967,000
Cottonseed oil, crude	170,419,000	141,750,000	168,091,000
Refined	132,848,000	113,600,000	288,422,000
Menhaden[3]	.....		
Sardine (pilchard and herring)[3]	44,000	8,484,000	41,851,000
Other fish oil, except liver oil[3]	211,000		
Lard, rendered and refined	[4]198,000,000	[5]45,661,000	112,042,000
Linseed oil, raw	45,122,000	33,825,000	128,317,000
Refined	15,647,000	17,393,000	37,686,000
Marine mammal oil[3]	.....	5,962,000	[2]27,872,000
Oiticica oil	.....	851,000	2,664,000
Olive oil, edible	1,694,000	145,000	2,449,000
Inedible	.....	[6].....	179,000
Sulfur foots	.....	[6].....	725,000
Palm oil, crude	.....	3,353,000	[2]15,771,000
Refined	[6].....	236,000	858,000
Palm kernel oil, crude	.....	[1].....	1,594,000
Refined	[6].....	[6].....	[6].....
Peanut oil, crude[7]	14,398,000	8,064,000	7,973,000
Refined	7,715,000	3,690,000	6,921,000
Perilla oil	.....	.....	.....
Rapeseed oil, crude	.....	[1].....	461,000
Refined	.....	203,000	1,688,000
Sesame oil, crude	.....	.....	.....
Refined	.....	[6].....	107,000
Soybean oil, crude	287,218,000	222,805,000	129,964,000
Refined	209,184,000	208,571,000	99,970,000
Tallow, edible (incl. refined)	27,085,000	[8]27,676,000	20,442,000
Tallow and grease inedible (other than wool)—			
All establishments	239,230,000	133,123,000	347,589,000
Establishments classified in meat packing industry	81,915,000	N.A.	N.A.
Tallow and grease, inedible, refined	10,899,000	9,990,000	13,285,000
Tung oil	7,081,000	3,443,000	29,098,000
Other vegetable oil, crude	4,352,000	6,517,000	16,904,000
Refined	4,709,000	5,210,000	5,283,000
Vegetable foots, 100% basis	17,805,000	12,034,000	46,357,000

Secondary Products

	Pounds		
	Production	Consumption	Stocks Feb. 28
Castor oil chemically dehydrated[8]	1,407,000	N.A.	2,822,000
Deodorized oil[9]	79,596,000	12,734,000	17,318,000
Coconut-type fatty acids, including coconut babassu, and palm kernel and such fractionated fatty acids as lauric, caprylic, capric, and myristic[8]	4,358,000	N.A.	6,586,000
Fish and marine mammal fatty acids	1,872,000	N.A.	1,037,000
Low rosin fatty acids (rosin content 20% or less)	6,680,000	N.A.	3,825,000
Oleic acid, including white oleic and red oil	7,513,000	N.A.	15,375,000
Stearic acid (40-50% stearic content)	5,800,000	N.A.	5,274,000
Other stearic acids (over 50% stearic content, high palmitic (over 60% palmitic), hydrogenated animal and vegetable fatty acids	9,442,000	N.A.	6,354,000
Unsaturated unhydrogenated animal fatty acids (other than oleic)	9,813,000	N.A.	15,483,000
Unsaturated unhydrogenated vegetable fatty acids	5,817,000	N.A.	10,090,000
Glycerine, crude (100% basis)[10]	19,802,000	20,156,000	15,515,000
Refined, all grades (100% basis)[10]	19,642,000	15,345,000	51,974,000
Grease oil, lard oil, and tallow oil[8]	6,681,000	N.A.	4,108,000
Hydrogenated animal fats and oils—			
Edible	2,909,000	1,199,000	833,000
Inedible	4,112,000	4,933,000	3,545,000
Hydrogenated vegetable oils—			
Edible—			
Cottonseed	40,389,000	37,144,000	21,882,000
Soybean	89,410,000	78,853,000	38,971,000
Other	6,108,000	4,345,000	2,814,000
Inedible	[11].....	1,614,000	2,597,000
Margarine[8]	[12]121,244,000	N.A.	32,143,000
Oleo oil and stearine, animal, edible	5,823,000	1,791,000	3,004,000
Shortening[8]	144,252,000	N.A.	133,017,000
Stearine animal, inedible[8]	1,366,000	N.A.	1,255,000
Vegetable oil, winter	12,013,000	10,655,000	13,585,000
Tall oil, crude	47,463,000	43,638,000	89,835,000
Refined (excluding low rosin fatty acids)	11,102 000	7,494,000	15,809,000
Winterized oil	53,489,000	29,180,000	48,542,000

N.A. Not Available.

[1] Included in "other vegetable oil, crude" to avoid disclosure of figures for individual companies.

[2] Data for stocks of crude palm oil, crude coconut oil, crude castor and sperm oil are on a commercial stocks basis and do not include figures for stock piles of strategic oils.

[3] Data for fish oil producers collected by Fish and Wildlife Service, Department of the Interior. Combined totals only are available for consumption and stocks of fish oil and marine mammal oil. Consumption data for cod, cod-liver, and other liver oils unavailable and stock figures for these items represent quantities held by producing firms only.

[4] Data on production collected by Department of Agriculture. These figures represent only rendered lard. According to this agency, refined lard production (federally inspected only) totaled 125,000,000 pounds in February.

[5] Excludes quantities used in refining.

[6] Included in "other vegetable oil, refined" to avoid disclosure of figures for individual companies.

[7] Data on production and stocks held at crude oil mill locations collected by Agricultural Marketing Service, Department of Agriculture.

[8] Data for stocks exclude quantities held by consuming factories.

[9] Winterized-deodorized oil, hydrogenated-deodorized oil, and cooking and salad oil not included.

[10] Includes data for synthetic glycerine.

[11] Not shown to avoid disclosure of figures for individual companies.

[12] The total for February, 1957, was packaged as follows: One-pound units, 114,122,000 pounds; bulk, pats or chips, 1,684,000 pounds; and bulk, other, 5,416,000 pounds. The sum of these items may not agree with the production total shown above because some margarine is not packaged during the same month in which it is produced.

CRODA INC. *Chemical Manufacturers*

SUPERFINE COSMETIC LANOLIN USP
'HARTOLAN' WOOL WAX ALCOHOLS BP
POLAWAX SELF-EMULSIFYING WAX
'FLUILAN' LIQUID LANOLIN
'PROTANAL' Sodium ALGINATE
'CRODACOL' CETYL, STEARYL, OLEYL ALCOHOLS

CRODA INCORPORATED 15 E. 26th ST., NEW YORK 10, N.Y., U.S.A.
Tel. MUrray Hill 3-3090

QUAKER STATE "SUPERFLEX"

a complete line of

MICROCRYSTALLINE WAXES

For More Details, Call or Write
WAX SPECIALTIES DEPT.
QUAKER STATE OIL REFINING CORP.
OIL CITY, PA.

Oils, Fats and Waxes

Feature of the oils and fats market last week was the weakness of edible oils, which declined fractionally led by the sharp break in soybean oil. This weakness affected competing oils with lower prices noted for cottonseed, corn and peanut. Buying interest for domestic needs lagged and with disappointing export business in soybean oil caused the market to weaken. Crude coconut oil was firmer, reflecting improved interest from Europe and prices advanced fractionally. Copra also was stronger for the same reason.

Tallow and greases were firmer as a result of improved export business. Trading took place at slightly higher prices. Offerings were limited and closely held. Domestic demand was light. Oleo oil remained strong due to stoppage of production by two producers. Oleo stearine and edible tallow were unchanged and steady.

In drying oils, tung oil was firm as consumers absorbed a good volume for June forward requirements. Oiticica remained steady, reflecting the short crop available for shipment from Brazil. Brazilian castor oil also was stronger, advancing fractionally due to scarcity of offers from Brazil and higher cost of oil from India. Demand for linseed oil was quite active for delivery against current contracts, while new business was limited to fill-in needs. Refined fish oils moved in a hand to mouth manner. Crude menhaden was quiet and nominal due to lack of domestic and export buying interest.

Quietness prevailed in vegetable waxes last week. Consumers were practically out of the market. Despite light demand carnauba wax remained steady and unchanged locally reflecting the strength of light offerings from Brazil. Lower bids for shipment which were acceptable recently have been turned. Crude and refined beeswax and candelilla were maintained at prevailing quotations.

Scarcity of linseed meal for prompt delivery further stiffened this market and quotations were raised 50 cents per ton. Soybean meal was easy but rallied and closed unchanged.

Price Trends

Advanced

Castor oil, No. 1, Braz., ¼c. per lb.
Coconut oil, crude, ¼c. per lb.
Copra, $1.50 per ton.
Greases, ¼c. per lb.
Linseed meal, 50c. per ton.
Tallow, ined., ⅛c. per lb.

Reduced

Corn oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Cottonseed oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Lard, cash, 4/10c. per lb.
Soybean oil, crude, ⅝c. per lb.
Refd., ⅝c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	April 20, 1956
118.91	118.76	119.02	113.10

For Current Prices see Page 9

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Thursday, April 18, follow:

	Sales	High	Low	Close
		Cents per pound		
May	305	15.78	15.25	15.36S
July	592	15.74	15.20	15.33S
Sept.	78	15.39	14.95	15.05 15.09
Oct.	28	15.25	14.90	14.92@14.98
Dec.	105	15.10	14.80	14.83@14.86
Mar.	17	14.98	14.85	14.85@14.95
May (1958).	9	14.98	14.90	14.80@14.88

Total sales and switches, 1,134.

Vegetable Oils

Castor — This market was quiet, but steady. Domestic grades were maintained at prevailing quotations. No. 1 Brazilian oil was firmer and advanced to 21c. per pound, tankcars, New York, prompt delivery.

Coconut—Crude was firmer with copra and fractionally higher at 11⅜c. per pound, tankcars, f.o.b. Pacific coast, prompt shipment at 12¼c., New York, basis. Shipments from the Philippines was stronger due to improved European interest.

Corn — Trading was reported light. Crude was lower at 13½c. per pound, tankcars, f.o.b. mills, prompt delivery. Refined oil was lower at 17.16c. per pound, tankcars, New York, prompt.

Cottonseed — Liberal liquidation and new speculative selling weakened futures and market registered fractional declines last week. Weakness of soybean oil and allied markets was a contributing factor combined with slow consuming demand and little export interest. Trade interests absorbed May and July on a scale downward. Late in the week some export business was reported at the low levels. Consuming demand was dull and featureless. Refined salad oil was lower with crude and declined to 16¾c. per pound, tankcars, New York, prompt delivery. Trading in crude cottonseed was inactive. Tankcars dropped fractionally to 13c. bid, f.o.b. mills, southeast and Valley; 13c. nominal, Waco and 12¾c., nominal, Lubbock.

Export declarations for cottonseed oil for the week ended April 18 were indicated by the Census Bureau as follows: Crude, 20,169,410 pounds; refined, 3,010,460 pounds and further processed, 231,180 pounds. For the month of March declarations were: Crude, 55,957,979 pounds; refined, 3,690,480 and further processed, 1,181,680 pounds, totaling 60,830,140 pounds.

President Eisenhower has limited 1957 butter oil imports to the 1956 level—1.8 million pounds—to prevent their interference with domestic price support programs. A Presidential proclamation placed an import quota of 1.8 million pounds for this year; for 1958 and subsequent years the annual quota will be 1.2 million. The President's action was taken after a 5-1 finding by the Tariff Commission that imported butter substitutes, including butter oil, are threatening to materially interfere with dairy product supports.

Linseed—Good demand continued for delivery against current contracts, while new business was restricted to actual needs. Market was unchanged and steady. Raw oil was offered at 12.7c. per pound, tankcars, and 13c., exwarehouse, Minneapolis, for April-June delivery.

Flaxseed—Offers of cash seed continued scarce and market remained firm despite inactive trading.

Minneapolis.—Extreme dullness persisted in cash flaxseed market. Offerings were at a standstill and crushers were reluctant to raise bids. No trades were reported in the spot cash market and to-arrive bookings amounted to only negligible small lots. Occasional "edges" were offered by crushers with dwindling supplies, but producers held to higher price ideas. The government crop report indicated that approximately four million bushels of free flaxseed remained on farms, considered more than ample to satisfy crusher requirements. Bids in the cash market held at $3.15 a bushel, spot and to-arrive, basis Minneapolis. With indications that most crushers would be suspending flaxseed operations soon, immediate prospect for the cash flaxseed market was dull. Arrivals for all accounts totaled 71 cars, compared with 120 cars a year ago. Shipments were 31 cars, against 115 a year ago.

Receipts and shipments of flaxseed, in bushels, were as follows:

	Receipts 1956-57	Receipts 1955-56	Shipments 1956-57
Past week	127,800	210,000	55,800
Since Sept. 1.	17,077,600	22,613,500	2,517,400

Oiticica—Replacements from Brazil remained firm due to short new crop. Trading was spotty. Tankcars were maintained at 17¼c. per pound, New York, prompt and later delivery. Drums were unchanged at 18¾c. to 19¼c. per pound, as to quantity.

Olive—Trading was slow. Tunisian oil on spot was unchanged at $3.10 to $3.15 per gallon, drums, spot duty paid. The same grade for shipment was stronger and lifted to $75 per 100 kilos, drums, c. and f. New York. Morroccan also was held at the same figure. New crop Argentine oil was lower and offered at $69 per 100 kilos, drums c. and f. New York, for June-July shipment. Reports from Argentine state the crop was larger than last year. Interest in Spanish oil for shipment continued inactive. Shipments were named at $80 per 100 kilos, f.o.b. shipping point.

The severe winter of 1956 caused serious damage to the olive trees of France, Spain, Portugal and Italy. The situation was reviewed by the Working Party on

TOM: Let's get more information on SWIFT'S STEARIC ACID... fresh! good color! stays fresh! — Al

A new folder shows you how Swift's Stearic Acids compare with as many as 6 similar products on the basis of exhaustive color, heat and freshness stability tests. Write for the stearic acid folder today! SWIFT & COMPANY, Industrial Oil Dept., 1844 165th Street, Hammond, Indiana.

SPECIFICATIONS

Characteristics	Single Pressed	Double Pressed	Triple Pressed	Triple Pressed Cosmetic
FFA (% as oleic)	102-105	103-105	103-105	103-105
Acid No.	203-209	205-209	205-209	205-209
Saponification No.	204-211	204-210	206-210	206-210
Color 5¼-in. Lov.	20Y/2R	2.5Y/.5R	1.5Y/.5R	1.3Y/0.4R
Titer °F.	126-128	129-130	130-132	130-133
Titer °C.	52.8-53.5	53.7-54.2	54.4-55.5	54.4-56
Iodine Value	8-12	5-7	2.5 Max.	1. Max.
Approx. Ratio Stearic-Palmitic	45/55	45/55	45/55	45/55
Ash Parts/Million	.....	10 Max.	10 Max.	10 Max.

Swift

Oleic Acids • Red Oils • Stearic Acids • Animal Fatty Acids • Textile Oils • Hydrog. Fatty Acids • Lard Oils • Sperm Oils • Spermaceti • Glycerine • Anti-Foamants • Tallows • Monoglycerides • Complete line of Industrial Oil Products

To Serve Your Industry Better

WAXES

Importers and Refiners
CARNAUBA • OURICURY
CANDELILLA
Crude • Refined • Bleached • Flaked • Powdered
MAMARONECK REFINED BRAND
Vegetable Waxes
CERESINS — OZOKERITES
Palm Waxes — Resin Blends
Compounds and blends made to your specifications

M. ARGÜESO & CO. INC.
441 Waverly Ave., Mamaroneck, N.Y.
Mamaroneck 9-4746 • Cable: MARGUESO • Established 1908

CERITA WAXES

GROCO 45
DISTILLED
PALM OIL FATTY ACIDS

Titre	42° — 45°C.
Color 5¼" Lovibond Red	5 max.
Color 5¼" Lovibond Yellow	40 max.
Color Gardner 1933	4 — 5
Unsaponifiable	2.0% max.
Saponification Value	203 — 206
Acid Value	202 — 205
F.F.A. as Oleic Acid	101 — 102%
Iodine Value	60 max.

Send for samples and free booklet "Fatty Acids in Modern Industry"

a. gross & COMPANY
295 Madison Ave., New York 17, N. Y.
Factory: Newark, N. J.
Distributors in principal cities
Manufacturers Since 1837

WAXES

NATURAL, COMPOSITION AND SYNTHETIC

Waxes spanning every conceivable industrial use, from cosmetics to Christmas candles, from collapsible tubes to carbon paper. More than 74 years' experience is at your disposal. Got a wax problem? Ask us.

STROHMEYER & ARPE COMPANY
139 Franklin Street, New York 13, N. Y. WA 5-2300

SUN BLEACHED

Beehive Brand **BEESWAX**
• FINEST QUALITY
• GUARANTEED PURE

WILL & BAUMER CANDLE CO., INC.
Dept. E-4 Established 1855 Syracuse, N. Y.
Spermaceti Red Oil Glycerine
Ceresine Stearic Acid

WARRANTED PURE BEES WAX

spotlight on

uniformity, color stability
in oleic acid

Emersol® 211 Elaine

increased sales appeal of premium shampoo

If the color of your product changes with age or from batch to batch, then this customer experience may interest you . . . *Case History No. 22-42: A well-known manufacturer of premium shampoos replaced the ordinary single-distilled oleic acid in his formulation with Emersol 211 Low Titer Elaine because of its uniform color and greater resistance to color change during aging. The resultant uniform color of his shampoos produced greater consumer acceptance and subsequently greater sales.*
While uniformity of color was this manufacturer's primary concern, he found also that Emersol 211's outstanding oxidation stability, superior resistance to rancidity, uniform viscosity, and low unsaponifiable content, added materially to the overall quality and aging properties of his products. And since Emersol 211 costs no more than competitive grades, all these sales advantages were realized at no extra cost. Whatever products you are making, the replacement of an ordinary oleic acid by an Emersol Elaine will impart to them a high degree of color stability, oxidation stability, and resistance to rancidity. These factors, coupled with uniformity and all-around high quality, will make your products better, make them fresh and appealing, and keep them that way longer. So, if you are not already using an Emersol Elaine, why not order your next requirements from Emery? They cost no more than competitive grades, so you have everything to gain, nothing to lose.

Emery

Fatty Acids & Derivatives
Plastolein Plasticizers
Twitchell Oils, Emulsifiers

Emery Industries, Inc., Carew Tower, Cincinnati 2, Ohio

New York; Philadelphia; Lowell, Mass.; Chicago; San Francisco; Cleveland; Ecclestone Chemical Co., Detroit
Warehouse stocks also in St. Louis, Buffalo, Baltimore and Los Angeles
EXPORT: Carew Tower, Cincinnati 2, Ohio

Oils, Fats and Waxes

olive growing and olive oil production, set up by the European Commission of Agriculture of the Food and Agriculture Organization of the United Nations (FAO), which met recently in Rome. The delegates of the main European olive-growing countries reported that the frost damages were even more serious than had been thought earlier. In Italy, the regions most affected were Umbria, Tuscany, the Marche, Abruzzi, Campania and part of Apulia. Out of a national stock of about 160 million olive trees, 20 percent have been severely damaged. In France also the 1956 frosts may be considered a national catastrophe. The damage took the form of wholesale destruction in ten out of twelve olive-growing departments. Spain and Portugal also suffered severely, but there are no definite statistics for an exact appraisal of the damage. Losses were not excessive in Israel, Greece, Tunisia, Morocco or Algeria.

Palm—Demand continued limited to actual needs. Drums were unchanged at 15¼c. to 16¼c. per pound, spot, as to quantity. Tankcars were offered at 13c., New York basis, for June-July arrival.

Peanut—Crude was weaker with crude sales at 13¾c. per pound, tankcars, f.o.b. mills, prompt delivery, off ¼c. Refined also was lower and offered at 17½c. per pound, tankcars, New York, prompt.

Rapeseed — Market was quiet, but steady. Tankcars were maintained at 18¾c. per pound, tankcars, New York, prompt delivery.

Soybean — Slow business for domestic and export account unsettled the market and prices declined sharply. Crude sold down 12⅛c. per pound, tankcars, Decatur April and bid; 12c. and bid for May; 12c., June and 11⅞c., bid July, same basis. Refined salad was lower at 15⅛c. per pound, tankcars, New York, prompt delivery.

Soybean Oil Futures

Sales and prices of crude soybean oil futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Thursday, April 18, follow:

	Sales	High	Low	Close
		Cents per pound		
May	8	12.48	12.02	12.00@12.06
July	28	12.15	11.88	11.89@11.92
Sept.	1	11.50	11.50	11.40@11.43
Oct.	1	11.35	11.35	11.27@11.34
Dec.	1	11.25	11.25	11.13@11.20

Total sales, 39 contracts.

Tung—Trading was quite active, with sales at 22c. per pound, tankcars, New York basis for June forward delivery. Market was steady. April-May delivery was well held at 22¼c., same basis. Domestic was without change at 22c., tankcars, f.o.b. mills. Drums was held at 23¾c. to 24½c., spot, depending upon quantity.

Miscellaneous

Castor Beans—With offers for shipment scarce, the market was merely nominal around $180 per ton, f.o.b. Brazilian port.

World production of castor beans in 1956 is believed to have been about the same as output in the previous year. The preliminary estimate of the Foreign Agricultural Service places the crop at 523,000 short tons compared with the 1955 revised estimate of 522,000 tons and the 1953 record outturn of 567,000 tons. The indicated decline from 1955 in Brazil's crop was offset by slight increases in India and Mexico. Insufficient information is available for the Soviet Union and Manchuria to estimate any material change in recent years. Roughly 50 to 60 percent of the estimated world production of castor beans originates in Brazil and India.

Production of castor beans grown alone in India in 1956 is reported officially at 141,120 tons, only slightly larger than the 1955 crop but roughly one-fifth more than the fairly constant outturn of the four previous years (1951-54). Castor oil production appears to be around 100,000 tons, indicating that total bean production including output from interplanted acreage may be in the neighborhood of 210,000 to 220,000 tons. The major producing state is Hyderabad which has accounted for about 40 percent of the pure crop in the last two years.

Imports of castor beans, and castor oil, at New York and Philadelphia last week were as follows:

	Pounds	
	Beans	Oil
Last week	995,400	796,000
Previous week	499,950	1,562,000
Corresponding week, 1956	1,110,450	1,136,000
Total this year	10,763,290	32,994,000
Corresponding period, 1956	16,525,750	24,457,000

Cocoa Butter — Trading was spotty. Stocks on spot ranged from 63c. to 68c. per pound, depending upon quantity.

Copra — Shipments were firmer and lifted to $154 per ton, c.i.f. Pacific coast. Trading was reported light.

Fats and Greases

Greases—Firmer tone prevailed due to improved export demand. Offerings also were limited and advanced ⅛c. Yellow

For Domestic and Export
COTTONSEED MEAL AND CAKE
PEANUT MEAL-SOYABEAN MEAL

Export Codes: ABC 5th, BENTLEY'S JUNIOR PEERLESS
Cable Address: BRODE
Phones: L. D. 271 — Local 38-2544
Teletype No. ME-260

THE BRODÉ CORPORATION
P. O. Box 700 1012 Falls Building
MEMPHIS, TENNESSEE

Oils, Fats and Waxes

grease was sold at 7c. per pound, tankcars, delivered and 7⅛c. asked for low acid. Choice white also was firmer and ranged from 9c. to 9⅛c., same basis. Domestic business was reported slow.

Lard—Price trend was downward and market closed fractionally lower. Cash lard declined to 14.38c. per pound, drums, Chicago.

Oleo Oil—This market remained strong due smaller production. Limited stocks were nominal at 19c. per pound, drums, prompt delivery. Oleo stearine was quiet and nominal at 13c. to 13½c., same basis.

Tallow—Improved export interest and light offerings gave this market a firmer tone. Sales took place at ⅛c. higher for domestic and export delivery. Bleachable fancy was higher at 7¾c. to 7⅞c. per pound, tankcars, delivered; prime 7½c. to 7⅝c.; special, 7⅛c. No. 1 was in good demand for export with sales at 7c. and bid, same basis. Edible tallow was unchanged at 11¾c., same basis. Guaranteed fancy was steady at 9¼c., drums, f.a.s. and bulk, 8¼c. to 8⅜c., f.o.b.

Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Thursday, April 18, follow:

No sales last week.

Fish Oils

Cod—Trading was quiet. Replacements were maintained at 10¾c. per pound, drums, exdock, New York, prompt shipment. Stocks on spot were 1c. higher.

Menhaden Crude — Buying interest lagged and market was entirely nominal. Tankcars were held around 8¼c. per pound, works and ¼c. more on board steamer. Demand for refined fish oils was spotty. Light pressed oil was unchanged at 11½c. per pound, tankcars, New York basis.

Cake and Meal

Cottonseed Meal — Trading continued slow. Stocks were light. Meal 41 percent was nominal at $54 to $55 per ton, sacked, Memphis; $57 Alabama; $59, Georgia and South Carolina, for April-May shipment.

Linseed Meal—Prices were stronger, up 50c. per ton for prompt delivery. Offerings continued scarce.

Minneapolis. — Offers for prompt shipment were scarce and quotations were steady to 50c. higher. Demand from trade was limited, market strength stemming from the fact that supplies were almost unavailable. Many crushers intend to suspend flaxseed operations for an indefinite period. Expeller meal for deferred shipment was 50c. higher, none obtainable for April. Crushers quoted extracted linseed meal, 34 percent protein, at $59 a ton, bulk, in carlots, f.o.b., Minneapolis and expeller, 32 percent at $58 for May shipment; $57 for June.

Shipments of linseed meal, in pounds, were as follows:

	1956-57	1955-56
Past week	13,500,000	13,560,000
Since Sept .1	453,040,000	533,290,000

Peanut Meal—Export demand kept the market fairly steady. Domestic buying still slow. Forty-five percent meal was quoted at $45 per ton, sacked, f.o.b. shipping points, Alabama and Georgia. The government last week offered peanuts to produce about 1,500 to 2,000 tons of meal.

Soybean Meal — Market was easy, but developed a steadier tone at the close, regaining early declines. Stocks were quite liberal. Demand was light and spot shipments were discounted as much as $3 below futures early in the week. Meal 44 percent rallied to $45 per ton, bulk Decatur, spot and May shipment; and $46 April-through September. Southern production was held at $48 per ton, bulk, f.o.b. Valley points, April-May shipment.

Waxes

While consuming demand for vegetable waxes was limited last week, quotations for all grades were unchanged and steady. Carnauba wax remained firm and spot stocks were closely held at prevailing prices, due to the strength of replacements from Brazil. No. 3 Ceara crude was quoted at 71c. to 72c. per pound, spot as to quantity and Parnahyba, 1c. to 2c. more. Refined pure Ceara and Parnahyba ranged from 80c. to 82c. per pound, same basis. Trading in candellila was spotty, but supplies of crude and refined were well held on spot and for shipment. Offers of crude African beeswax were scarcer due in part of increased buying for European account. Brazilian and Chilean crude also were offered sparingly. Refined beeswax remained steady, reflecting the firmness of crude.

Pharmaceutical Ass'n

—Continued from page 7

the convention will be addressed by Averell Harriman, Governor of New York, and Dr. Howard Rusk, associate editor of the New York *Times* and chairman of the Health Resources Advisory Committee of the Office of Health Mobilization.

This year, Dr. Fischelis said, the convention returns for the seventh time to New York where the first national meeting of pharmacists took place in 1851, the event which led to the formation of the association in the following year.

BUY IT IN THE WEST

- A T & M 42" S.S. Centrifuge, perf. basket
- Bird 18" x 28" S.S. continuous Centrifuge
- Bird 32" x 50" 316 S.S. cont. Centrifuge
- Sharples PY-14 Super-D-Canter, 10 HP motor
- Williams Roller Mill, 3 roller High side
- Robinson 36" single runner Attrition Mill
- Patterson 6' x 8' Buhrstone lined Pebble Mill
- Day 40" x 120" single deck Re-Ball Sifter
- Micro Model 2-TH Pulverizer, 15 HP motor
- Fitzpatrick Model D Comminuting machine, 3 HP
- Wyssmont R-32 Dryer, turbo-type, brand new
- Link-Belt Roto-Louvre Dryer, 310-16, comp.
- Link-Belt Roto-Louvre Dryer, 207-10, comp.
- Allis-Chalmers 6 x 7 x 100 Rotary Kilns, mtr
- Devine Vac. Shelf Dryer, 17 shelves 80 x 60
- Rotary Kiln, 8 x 125, complete, less motor
- Niagara 510-28 Filters, S.S. leaves, (2)
- Sweetland #7 Filter, 20 leaves on 4" centers
- Shriver Filter Press, 36" x 36", 20 plts & frms
- Groen 60 gal. Model RA unit, S.S. Kettle, new
- Groen 80 gal. Model RA unit, S.S. Kettle, new
- Lee 250 gal. S.S. Kettles, ASME construction (4)
- Tyler-Hummer Screen, 3 x 5 S.S. single deck (2)
- Valley 16" dia. S.S. Twin Screw Press, 25 HP
- Stokes Rotary RB-1 Tablet Press, 16 punch
- Condensers, nickel shell & tube, 300 sq ft
- Ingersoll-Rand Compressor, Imperial XB, 200 HP

GOOD USED EQUIPMENT
MACHINERY AND EQUIPMENT COMPANY
GO WEST
514 Bryant Street • San Francisco 7, Calif.

FMC
REASONABLY PRICED BALL & PEBBLE MILLS

4343 D5—Patterson Type D Porox Pebble Mill; 24" x 36" with charge of pebbles and 2 HP motor.
4347 B1—Abbe Porcelain Lined Pebble Mill; 48" x 60".
4347 B2—Abbe Porcelain Lined Pebble Mill; 36" x 42".
3745C—Two Patterson Buhrstone Line Pebble Mills; 6' x 5' and 6' x 8' complete with pebbles.
M3-M101—Steel Ball Mill; 20" x 44" with 3 HP motor.
3693—Steel Ball Mill 34" x 38".
M3 C302—Abbe No. 5A Steel Ball Mill; 3' x 4' motorized.
3443—International 5' x 8' Porc. Lnd. Pebble Mills; 5 HP Gearmotors.
3789—Patterson Pebble Mills from 20" x 30" to 6' x 8'.
3564—Abbe 50 gal. Porc. Lined Pebble Mill; 20" x 30".
3800—Hardinge Conical Ball Mill with Titanite Liners; 10' x 48" with scoop feed and accessories.
M3 D300—Abbe Unlined Steel Ball Mill; 6' x 8'.
M3 G301—Patterson Unlined Steel Ball Mill; 6' x 5'.
M3-B100—Patterson 8' x 16' Jacketed Ball Mill; Chrome Manganese lined; 100 HP motor.
M3-202—Patterson Byerlite Lined Ball Mill; 6' x 8'; 50 HP.
4147 C9-10—Two Smidth Tube Mills 5'5" x 20'; V belt drive.
4147 C3-6—Four Gates Tube Mills; 5' x 22'.

Good Prices Paid for Your Surplus Equipment

FRED R. FIRSTENBERG, Pres.

FIRST MACHINERY CORP.
209-289 TENTH ST.
BROOKLYN 15, N. Y.
STerling 8-4672

BRILL EQUIPMENT CO.

DRYERS

3—Devine Vacuum Shelf 20, 19 and 18—40"x43" shelves with Condensers.
3—Devine Double Door Vacuum Shelf 17 and 20—59"x78" shelves.
4—Drying System, Inc. steam heated Tray Dryers, 95 sq. ft.
3—Buflovak 42"x120" Atmospheric Double Drum.
2—Devine 4'x9' Atmospheric single drum.
1—Hersey 1½'x12' Rotary Hot Air 304 S.S. with steam coils.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
3—Louisville Rotary Steam Tube 38"x25', 6'x40', 6'x50'.
4—Bartlett & Snow Rotary 6'x30', 7'x30', 8½'x35'.
1—Allis Chalmers 7'x60' direct heat Rotary ⅜" shell.
1—Link Belt 5'2"x20' Steel Roto-Louvre, oil fired.

MIXERS

1—Baker Perkins #15VUMM, 100 gal. jacketed, 100 HP.
2—Baker Perkins #17DAM, 200 gal. jacketed, Sigma Blades.
1—Baker Perkins 100 gal., 304 S.S., Sigma Blades.
5—Day "Cincinnatus" double arm 250 and 100 gals.
1—Patterson 6' dia. Steel Conical, 15 HP motor.
5—Steel, jacketed, Powder 50, 225 and 350 cu. ft.
1—4' dia., 304 S.S., Conical, 3 HP motor.
1—Eppenbach 1 HP, 304 S.S. Homo Mixer.

MILLS

1—International 6'x7' porcelain lined Pebble Mill, 30 HP motor.
3—Patterson, Abbe, 6'x8' unlined Ball Mills.
2—Abbe 5'x6' and 4'x5' Silex-lined Pebble Mills.
1—#2DH Mikro Pulverizer, 10 HP motor.
1—National 6"x12" Two Roll Mill, motor driven.
5—Jeffrey Hammermills 20"x12", 15"x8", motor driven. NEW.
1—Williams 30 HP Ball Bearing Hammermill.

CENTRIFUGES

2—Sharples C-27, C-20 Super-D-Hydrators 316 S.S.
1—Sharples PY-14 Super-D-Canter, 304 S.S.
5—Bird 32"x50", 316 S.S. solid bowl, continuous, fume tight, 60 HP TEFC motors, New 1953.
2—Bird 18"x28", 36"x50" steel, continuous, solid bowl.
2—Bird 18"x28", 24"x38" Stainless Steel, Continuous, Solid Bowl.
2—Tolhurst 40" Suspended Steel Perforated 15 HP motors.
1—Bird 40" Suspended rubber covered, imperforate basket.
2—Bird 40" Suspended 347 S.S. perforated basket, TEFC motor.
1—AT&M 36" center-slung, rubber covered, perforated basket.
1—Tolhurst 32" Suspended, 304 S.S. perforated basket.

KETTLES, REACTORS, CONDENSERS, EVAPORATORS, TANKS

1—Artisan 450 sq. ft. Stainless Steel, Single Effect Evaporator, complete with piping, receiver, separator and condenser.
1—600 gal., 316 S.S. jacketed, agitated Reactor 200# internal pressure, 90# jacket pressure.
2—500 gal., 347 S.S. jacketed, agitated Reactors 300# int. pressure, 75# jacket pressure.
1—1000 gal. nickel clad, jacketed, agitated Reactor.
2—Pfaudler 250 gal. glass lined, jacketed, agitated Reactors.
3—Pfaudler 300 and 50 gal. glass lined, jacketed Reactors.
3—3000 gal., 304 S.S. jacketed, agitated Tanks 9'x7'.
1—3500 gal., 304 S.S. Horizontal Tank 5'6"x16'.
5—1000 gal. Stainless Steel Clad, Vertical Storage Tanks.
1—Langenskamp 6'x5', 316 S.S. Tank.
2—Langenskamp 600 gal., 304 S.S. agitated Tanks with coils.
1—10,000 gal. Aluminum Tank 10'x16', ½" shell, 25# W.P.
3—Stainless Heat Exchangers, 1220, 947 and 500 sq. ft.

FILTERS

1—Oliver 8'x10' Monel Rotary Vacuum.
1—Eimco 18"x12", 316 S.S. Rotary Vacuum.
1—Feinc 3'x1', 316 S.S. Rotary Vacuum with vacuum and receiving Tank.
1—Feinc 5'x3' Monel Rotary Vacuum String.
1—Oliver 5'3"x8' Steel Rotary Vacuum.
1—Niagara 230-32 Pressure Filter, 230 sq. ft., 304 S.S.
2—Sparkler 33-S-28 Pressure Filters, 150 sq. ft., 304 S.S.
1—#12 Sweetland Filter, 48 leaves, 3" centers, 640 sq. ft.
4—Shriver 36"x36", 30"x30", c.i. Filter Presses, P&F, washing

MISCELLANEOUS

3—25 ton Freon Refrigerating Units.
10—Orville Simpson Rotex Sifters 60"x84", 40"x84".
3—Robinson Gyratory Sifters 30"x104", triple deck.
7—Stokes DD2, DS3, D3, B2, "R" and "F" Tablet Presses.
10—Nash Vacuum Pumps H7, H6, H5, L5, H4, TS7, #4, #2, AL-572.
2—Stokes #412G, 412B Vacuum Pumps, motor driven.
15—Chlorimet, Durimet and Duriron Centrifugal Pumps, 1½" to 5".

Partial List of Values — Send for News Flash!

TEXAS OFFICE: 4101 San Jacinto St., Houston 4, Texas — Tel: Jackson 6-1351

BRILL EQUIPMENT COMPANY
2401 Third Ave., New York 51, N.Y. Tel.: CYpress 2-5703

PERRY EQUIPMENT CORP.

GOOD EQUIPMENT IN STOCK

FILTERS—Pressure Leaf

1—Niagara #510-28 Type 316 Stainless Steel, 21 leaves, 510 sq. ft.
3—Sparkler #33-S-28, T304 St. St. plates, 151 sq. ft., steel tank.
1—Sweetland #12—72 leaves.
1—Sweetland #5—20 leaves.
1—Industrial 18 x 48-RR, Rubber lined, 60 sq. ft., rubber leaves.
1—Klein #2 Type 304 Stainless Steel, 11 leaves, 97 sq. ft., with closed feeder.
8—Bowser, Butler, Industrial & Klein—from 7 sq. ft. to 140 sq. ft.

FILTERS — ROTARY VACUUM

1—Oliver 5'3" D x 3' F, Precoat, pressure housing, rubber lined.
1—Oliver 5'3" D x 8' F, Precoat, Steel. Unused.
1—Feinc 6'6" D x 6' F, String Discharge, steel.
2—Eimco 10' D x 12' F, rubber covered.

FILTER PRESSES
Plate & Frame

1—Aluminum, 15" Sperry, 29 ch. 1-eye, open dely.
1—C.I. 7", 21 ch. 2-eye, cl. dely.
2—C.I. 24" Sperry, 30 ch., 2-eye, cl. dely.
2—C.I. 30" Shriver, 29 ch., 2-eye, open dely.
1—C.I. 30" Shriver, 35 ch., 1-eye, open dely.
2—C.I. 30" Shriver, 50 ch., 1-eye, open dely.
1—C.I. 30" Sperry, 36 ch., 1-eye, open dely.
1—C.I. 30" Shriver, 36 ch., 2-eye, open dely.
1—C.I. 30" Sperry, 46 ch., 3-eye, visib. cl. disch.
1—C. I. 36" Shriver, 20 ch., 2-eye, cl. dely.

FILTERS — MISCEL.

3—Adams #WJR-1, T304 Stainless Steel.
2—International Single Disc, T304 Stainless Steel, #3—24" dia. and #5—33" dia.
1—Commercial Fulflo #WXFBR-8-15, 6 spool—UNUSED.
1—Infilco 12" dia. Darco Water Filter.
3—Leval Stone Filters—5 GPM 7 10 GPM.
5—Alsop WF-1 Brass Water Filters.
1—Alsop SD-6-WR-10, T304 St. St.
1—Alsop SD-6-WR-10, Jacketed, T304 St. St.
1—Ertel 6 plate Bronze Filter.
1—Star 15 plate Bronze Filter.
1—Enzinger-Union 26 plate Brass Filter with Packer.

MISCEL.

1—Stokes 43A Oscillating Granulator, Steel.
1—G. E. Motor Generator Set—250 V, 15 KW DC; 20 HP, 3/60/220/1200 motor.
1—Link-Belt Skip Hoist Drive, type R-2, 4800# cap., 43' lift, 15 HP motor.
2—Shepard-Niles 4-ton Cab controlled Monorail Cranes, 20 HP motor hoist motor; size 36 type R bucket.
1—Cherry Burrel 400 GPH Homogenizer, St. St. Sanitary Viscolizer, 15 HP.
1—Marco Flow-Master AC-500 Homogenizer, 500 GPH, St. St., 7½ HP.

PERRY EQUIPMENT CORP.
1407 N. SIXTH STREET · PHILADELPHIA 22, PA.
Phone (Phila.) STevenson 4-3505

C20 Sharples Super-D-Hydrator SS.
26" AT&M Susp. Perf. Centrifuge SS.
36" x 50" Bird Cont. Centrifuge.
40" SS Bird Sus. Perf. Centrifuge.
Rotocione Collector Size 36, Type W.
3' x 14' x ¼" steel Column, 75 PSI.
4'x40'x1-1/16" Steel Column, 470 PSI.
Compressor Bury 1600@110#, 300 HP.
3500 Condenser Admir. 125#.
13500 sq. ft. Condenser Admir. Tubes.
4' x 18' Cooler—Portable.
5' x 20' x ¼" Rotary Cooler.
6' x 40' Louisville Rotary Cooler (2).
30" Robinson Rotary Cutter, 30 HP.
6' x 50' Louisvile Steam Tube Dryer.
502-16 L.B. Roto Louvre Dryer.
705-20 L.B. Roto Louvre Dryer, SS.
705-24 L.B. Roto Louvre Dryer.
8' x 125' x ¾" Kiln.
Wyssmont Size Q24E—Turbo Dryer.

3'x15' STOKES 59B HERESITE LINED ROTARY VACUUM DRYER 7½ HP WITH COLLECTOR.

#2 Sweetland Filter Cast Monel.
#10 Sweetland Filter 36—3" leaves.
7' x 18' Patterson Ball Mill 2 Comp.
Jeffrey Hammermills, 15 x 8, 20 x 12.
3620 DIXIE-Non Clog Hammermill.
Mikro Pulverizers 2TH & 1W.
Case Packer-Std. Knapp 6/1 gal. cans.
412G Stokes Microvac (NEW).
300 gal. S.S. Jktd. & Agit. Reactor, New.
40" x 84" Rotex #41 Single Deck.
60" x 84" Single Deck Rotex Screen.
Gyro-Sifter Low Head 7 screens, 1 HP.
4500 gal. Hortonsphere.
2500 gal. Rubber lined Tank 7' x 9'.
12" Merrick Weightometer.

→Send Us Your Surplus Lists←

HEAT & POWER CO., Inc.
60 EAST 42nd ST., NEW YORK 17, N.Y.
MUrray Hill 7-5280
[Machinery & Equipment Merchants]

STEIN EQUIP'T *OFFERS*

DRYERS AND KILNS
Stokes 2'x6' Rotary Vac. Dryer.
1—Allbr. Nell 4x9 Atmos. Drum Dryers.
1—Buffalo Vac. Drum Dryer, 24"x20".

CENTRIFUGALS AND CENTRIFUGES
4—Tolhurst 40" Suspended Type.
8—Centrifugals, 12", 20", 26", 30", 40" & 48" Steel, Copper, Stainless & Rubber.
6—Sharples No. 5A Stainless & #6.
2—De Laval Multi Clarifiers 300 & 301.

FILTERS
#2 Sweetland Filter, 12 Stainless covered leaves & other sizes. Oliver Filters.
1—Vallez Filter #49 with 41 Stainless covered 44½" dia. leaves.
Gen. Amer. 2'x1' Rotary Vac. Filter.
Sperry and Shriver 6" to 36" iron & wood.
Ertel 10 disc Filter, 12" dia.

KETTLES AND TANKS
Pfaudler 200 gal. Glass Lined Jack. Kettle.
Dopp 350 gal. Agit. Jack. CI Vac. Kettle.
2—Impreg. Units 30" & 36" dia. complete.
6—Jack. Steel Kettles up to 3000 gals.
2300 gal. vert. agit. Jack. Steel Kettle.
1—250 gal. Lead Lined Kettle.
Stainless, alum., copper, glass lined, lead lined and steel kettles and tanks.

PULVERIZERS AND MILLS
2—Mikro Pulverizers #2TH & #2SI.
Pebble Mills 24"x30", 30"x30", 30"x34", 30"x42", 4'x5'. Also jar mills.
#1 Raymond Autom. Pulverizer, 20 HP.
1—#00 Raymond Mill, 30 HP complete.
2—#0000 Raymond Mills.
Sturtevant #00 Swing Sledge Mill, 3 HP.
Schutz-O'Neill #1 & 20" Pulverizers.
Williams #3 & 2XX Hammer Mills.
Ball & Jewell Rotary Cutters Lab & up.
Jeffrey 18"x18" single Roll Crusher.
2—Robinson 18" & 22" BB Attrition Mills.
1—Lehman 4 roll WC., 12"x36" Steel Mill.
4—Lehman & Kent 3 Roll Steel Mills, 9" x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
Houchin 18"x30" 4 Roll Granite Stone Mills.
2—U.S. & Premier 1½ HP Colloid Mills.

MIXERS, SIFTERS & SCREENS
Day Imperial 75 & 150 gal. Jack. Mixers.
Lancaster 6' dia. Vert. Mixer, 25 HP.
Kent 3 HP, continuous Dry Mixer.
Baker Perkins double arm Mixers, 100 & 50 gals. Also single arm Mixers.
Blystone 3000# horiz. Spiral Mixer.
Day Brighton 20 gal. Change Can Mixers.
Read 50 & 100 gal. double arm Mixers.
Read 80 qt. vert. Mixer, 3 speed.
Tyler 3'x5' Vibratory 2 deck Screen.
10—Dry Powder Mixers, 50 to 3,000#.
3—Day 8, 15 & 40 gal. Pony Mixers.
15—Portable Elec. Mixers, ¼ to 3 HP.
6—Lead and Paste Mixers to 150 gals.

MISC. AND SPECIALS
Stokes & Kux 2½" dia. single punch Preform Machines. Also rotary types.
Colton & Stokes ½ dia. single punch.
Anderson & French Oil Expellers.
3—Stokes and Day Powder Fillers.
Filling Machines & Labelers.
Pneumatic Scale Automatic Capper.
1—Howe Mogul barrel and bag packer.
2—Worth 12"x12"x12" Vac. Pumps.
8—Devine, Buffalo, Stokes Vac. Pumps.
Conveyors & Elevators, Gas Boilers.
Soap Machinery for Toilet, Laundry, etc.
Centrif., Rotary, Duplex & Triplex Pumps.

PARTIAL LISTING. WRITE FOR BULLETIN. WE BUY YOUR SURPLUS MACHINERY & PLANTS

STEIN EQUIP'T CO.
107 EIGHTH ST., BROOKLYN 15, N. Y.
STERLING 8-1944

PARTIAL LISTINGS

WRITE FOR BULLETINS

1—Erie City 150 H.P. Economic Boiler, 125# W.P., w/#6 Oil Burner.
1—Davenport 6' x 30' Rotary Steam Tube Dryer.
2—Devine #28 Double Door Vacuum Shelf Dryers, 59" x 78" shelves.
1—Stainless Steel 30" x 18' direct heat Rotary Dryer w/flights.
1—All. Nell 4' x 9' Double Drum Dryer.
2—Stokes "R" Single Punch Preform Presses w/variable speed drives w/3 H.P. motors.
1—Day 350 gallon double arm — sigma blade Stainless Steel Mixer.
1—W & P 100 gal., jack., double arm Mixer.
1—Reactor 200 gal.—jacketed.
2—Steel jacketed Kettles, 800 & 1000 gallon.
3—Day 8 & 40 gal. & Ross 50 gal. Pony Mixers.
1—Patterson 4' x 5' Pebble Mill.
3—Rotex Screens 20" x 48" to 40" x 84".
1—Fletcher 48" S.S. Extractor.
1—Inconel Heat Exchanger, 195 sq. ft.
2—±12 Sweetland Filters, 30 monel leaves on 4" centers.

WE BUY SINGLE ITEMS TO COMPLETE PLANTS

The Machinery and Equipment Corp.
293 Frelinghuysen Ave., Newark 12, N. J.
TAlbot 4-2050

EQUIPONOMICS

BIRD CONT.—Cent 18"x28" 317 S.S. 15 HP
BLENDER—2000# Cap. With 15 H. P. Drive
CENTRIFUGE—Susp. 26" S.S. 15 HP, 4 Speed
FLAKER—BUFLOVAK—Single Roll 6"Dx8" Complete —New
HOMOGENIZER—Marco Komb.S.S Mo 500
DRYER — Buflovak Double Drum 32"x90", Rebuilt
COMPRESSOR—Nash-Hytor MD-571 7½XP
COLLOID MILLS—S.S., 6", 10", Charlotte 40 HP
FILTER PRESS—Shriver 18" x 18" C. I. 12 plates, 11 1" Frames 4 eye washing
NIAGARA FILTER—Model 35.20 7 s. s. leaves 35 sq. ft.
VACUUM SHELF DRYER—Devine 40"x 43"., 7 shelves with condenser and receiver

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N. J.
Tel.: FUlton 1-1103-4

FMC

EXCELLENT SELECTION SIFTERS and SCREENS NOW IN STOCK

S5 261 — Selectro Stainless Steel Screen; double deck; 28" x 72"; 3 HP.
3989 K2—Orville Simpson Rotex Sifter No. 21; 30" x 60"; 1 HP.
4072—Patterson GyroCentric No. 300; 20" x 48" S/S; 3 HP motor.
3515—Smithway 3/S Shaker Screen; 40" x 99" with 1 HP motor.
3484 A33—Sutton Steel Separator Model B 100 with 5 HP motor.
3903—Robinson Unique Gyro Sifter; 20" x 84" Double Deck.
3853 S10—Ajax Vibratory Screen; 18" x 48"; Stainless Contacts.
S5-240—Selectro 18" x 60" Steel 2 Deck Screen V drive.
3853S-11—Robinson Vibrating Screen 40" x 60"; S.S. Contacts.
4261 S1—Robinson Unique Gyro Sifter; 30" x 72" 1 HP.
4319—Robinson Gyrex Double Deck Sifter; 53" x 102".
S5-244—Tyler Hummer Screen; 3' x 5' with converter, exciter and motor.
4217—Tyler Hummer Screen 34" x 61" with Vibrator.
S5-251—Orville Simpson Rotex Triple Deck Sifter; 18" x 80" with 1½ HP motor.
4022 P2 — Robinson Unique Gyro Sifter; stainless lined; 20" x 69½"; ½ HP motor.
S5-300—Robinson Single Deck Screen No. 11; 20" x 72" motorized.
4081 N2—Witte Stainless Steel Sifter; 21" x 10' complete.
4082A — Abbe Blutergess Turbine Sifter No. 1; motorized.
4300 M5—Dings Magnetic Separator with 1 HP motor.

SEND US YOUR LIST OF SURPLUS ITEMS

FRED R. FIRSTENBERG, Pres.

FIRST MACHINERY CORP.
209-289 TENTH ST.
BROOKLYN 15, N. Y.
STerling 8-4672

NEW AND GOOD-AS-NEW EQUIPMENT

1—Stainless Tank #430 Chrome, vert. 7'x10' deep.
20—Jacketed Kettles—Stainless, Copper, Aluminum.
1—Day Mixer, steam jacketed, 50 gal. Sigma Blade.
1—Sperry Filter Press 42", open del., 53 plates & frames—like new.
60—New Pressure Cookers, 18"x18" & 24"x28".
1—New Glass Nash Centrifugal Pump, 150gpm.
1—New Nash Vacuum Pump Type AL-572.
1—Buflovak Jacketed Impregnating Tank 42"x52".
1—Stedman Disintegrator size 40-8.
1—Abbe Ball Mill, 36"x42" Buhrstone lined.
1—Nash Air Compressor, Type AL-623.
1—Manton Gaulin Stainless Homogenizer 123 gph.
1—I&R Vacuum Pump, 5 H.P., 60".
4—Heat Exchangers, 12" dia. 11' lg., 43 steel tubes.
1—Raymond 8" Hammer Mill, like new
2—Louisville Steam Tube Dryers 6'x35'.
1—New Louisville Continuous Filtering Machine.
2—Stainless Steel Steam Jacketed Readco Mixers.
1—#316 Stainless Reactor, 265 gals. cap., Jacketed.
Abbe Pebble & Tube Mill, 5'x22'—Buhrstone Lined.
1—Patterson Ball Mill, porcelain lined, 17"x22".
1—Patterson Ball Mill, 42x36, Jacketed.
2—Large Steam Jacketed Horizontal Mixers.
2—Ribbon Type Mixers, 50 & 80 cu. ft.—like new.
2—Steel Tanks 90,000 gals. ea. vert. welded const.
2—Ball & Jewell #2 Cutters with 75 H.P. Motors.
1—J. H. Day 3-roll Mill 9x16.
3—3,000 gal. Jacketed Kettles with Turbo Agitators.
1—#10 Day 300 gal. Jacketed Sigma Blade Mixer.
4—New Heat Exc. 60' with Cupro Nickel Tubes.
1—Sparkler Stainless Filter Model 33-S-9.
3—4'x8' Shaker Screens.
6—W & P Mixers, jacketed, heavy duty, sigma blade, 200 gal. with hydraulic dumpers.
3—Baker-Perkins Mixers—same as above.
1—Abbe 300 gal. Buhrstone Lined Jacketed Ball Mill.

H. LOEB & SON
4643 LANCASTER AVE., PHILADELPHIA 31, PA.

"WANTED"

Purchasing Agent Looking For A Good Buy

2—Sparkler model 18-D-7 filters.
6—SS Tanks; 7000, 3000, 2000, 1200, 800.
1—Baker Perkins 200 gallon jacketed mixer.
3—Stokes tablet presses, models T&R.
1—Standard Knapp gluer and sealer, model 421.
1—Epworth jacketed manganese ball mill, 5 x 4'.
1—Robinson #13 jacketed ribbon blender, 4 x 9'.
2—Pony mixers, 50 gallons capacity.
3—Filter presses, Iron, 24", Sperry and Shriver.
1—Sperry Everdur filter press, 24".
2—Shriver filter presses 24", 1 aluminum, 1 lead.
1—Sharples super-d-hydrator, stainless steel, 20 x 10".
2—J. P. Devine 10 shelf vacuum dryers, 40 x 44".
1—Buflovak monel evaporator, single effect, 148 sq. ft.
1—Swenson double effect evaporator, 835 sq. ft.
1—Abbe #8 porcelain lined pebble mill, 18 x 24".
10—Powder blenders, 100# to 7500#.
2—Fitz mills, models D & K.
1—Robali single deck sifter, 40 x 84", stainless steel.
1—Buflovak 6 x 8" chrome plated double drum dryer.
2—Link Belt twin paddle continuous mixers.
3—J. H. Day pony mixers, 2¼ gallon, 8 gallon.
1—Abbe-Lenart 55 gallon stainless steel mixer.
1—Pfaudler 500 gallon reactor.

WE BUY YOUR SURPLUS

CHEMICAL & PROCESS MACHINERY CORP.
52 Ninth Street · HYacinth 9-7200 · Brooklyn, N. Y.

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

LIQUIDATING
Chemical Process Equipment
Paterson, New Jersey

2—Pfaudler Series R Glass Lined Jacketed Reactors, 750 gallons with agitators, drives, etc.

2—Pfaudler Series R Glass Lined Jacketed Reactors, 500 gallons with agitators, drives, etc.

2—S.S. 2000 gallon Jacketed Reactors.

3—S.S. 1000 gallon Jacketed Reactors.

1—Shriver Wood Plate & Frame Filter Press, 42" x 42", 2 eye, open delivery.

5—Shriver & Independent Filter Press Skeletons, 18" to 36".

8—Lead Lined Mixing Tanks 6000 gallons each with 10 HP Philadelphia Gear Reducer Type HVT.

1—Steel Lead Lined Vacuum Receiver, 1500 gallons, complete with agitator and drive.

1—Steel Jacketed Kettle, 500 gallons, with turbo agitator.

3—Two Truck Atmospheric Tray Dryers.

1—Mikro #2TH Pulverizer, complete with motor.

1—Steel 60 gallon Autoclave.

1—Stokes Model 412E Vacuum Pump.

1—Premier Colloid Mill, Model UB6.

Also: Drives, Motors, Pumps, Tanks, Etc.

Write or Call for Further Information

10—Sweetland #12 Filters with 72 S.S. leaves.

3—Sperry 24" x 24" C.I. Plate & Frame, 4 eye, closed delivery Filter Press, 30 chambers.

2—Niagara S.S. Filters, Model #510-28.

1—S.S. Vertical 10,000 gallon Storage Tank.

6—Vertical S.S. Storage Tanks, 1000 and 3000 gallons.

1—Vulcan Stainless Steel Bubble Cap Column, 3' x 43'1", 30 trays.

1—Bird Continuous Centrifugal Steel Filter, 24" x 38".

1—Baker Perkins Ter Meer, Type 316 Stainless Steel Centrifugal Filter, Model HS-24".

1—Stainless Steel Jacketed 200 gallon Vacuum Reactor.

1—Stokes 5' x 12' Double Drum Dryer.

1—Vulcan Rotary Kiln, 6'6"x100'.

2—Stokes Stainless Steel Rotating Vacuum Dryers, 3' x 10'.

1—S.S. Bantam Pulverizer.

1—Niagara S.S. Filter, Model #200-36.

1—Buflovak Double Drum Dryer, 42" x 120", ASME Code.

1—Stokes Stainless Steel Rotating Vacuum Dryer, 6'x10' (New).

1—Link Belt Stainless Steel Roto Louvre Dryer, Model 207-14.

R. GELB & SONS, INC.
UNION, NEW JERSEY Est. 1886 MUrdock 6-4900

FMC

STRETCH TIGHT DOLLARS With GOOD REBUILT FMC EQUIPMENT

4507/Al-6—Tolhurst Rubber Covered Centifuges 40"x20"; suspended type; monel plow; bottom discharge; 7½ HP. 2 Sp Motor.

Baker Perkins Heavy Duty Double Arm Jacketed Mixers 50 gal.; 100 gal., 200 gal. and 300 gal. IN STOCK.

NEW FALCON Ribbon Blenders and Rebuilt J. H. Day Mixers in all sizes ready for immediate delivery.

Brand NEW Stainless Steel Kettles and Tanks up to 500 gal. in stock; other sizes immediately available.

Pfaudler Glass Lined Jacketed REACTORS; 500 and 1000 gal.

Shriver and Sperry Filter Presses up to 42" all metals.

Hammer Mills by Williams, Mikro, Gruendler Raymond, Bauer Jay Bee, Robinson, in all sizes and capacities.

Pebble Mills and Ball Mills by Abbe, Patterson, International, Hardinge, unlined and lined.

Sifters and Screens by Orville Simpson, J. H. Day, Ajax, Robinson, Patterson, Selectro, Tyler Hummer and others.

Send for the FMC Pocket Size Equipment Guide for Complete Inventory Just Off the Press.

FRED R. FIRSTENBERG, *Pres.*

FIRST MACHINERY CORP.
209-289 TENTH ST.
BROOKLYN 15, N. Y.
STerling 8-4672

SAVE WITH CONSOLIDATED

2—#12 Sweetland Filters, on 2" and 4" c.c., with monel covered leaves. Also bronze leaves for #12. 24 steel rim, 12 monel rim unused. 46 slightly used; 1—#2, 23 copper lvs., 1½" c.c.
1—Karl Kiefer Vari-Visco Can Filler.
2—J. H. Day 400 & 800# S. S. Ribbon Mixers.
2—Stokes Model T & F Tablet Machines.
2—Abbe-Lenart Jack. S.S. Mixers, 110 gals.
4—Sperry 18", 24" & 36" P & F Filter Presses.
1—Pfdlr GL 300 gal., jack. agt. Kettle.
2—Patt. 6'x10' Burr. L. Pebble Mills.

Our 49th Year

CONSOLIDATED PRODUCTS CO., INC.
60 BLOOMFIELD ST., HOBOKEN, N. J.
Tel.: OLdfield 9-4425 N. Y. Tel.: BA 7-0600

FORK LIFT TRUCKS—2000# Hyster, 6000# Yale, pneumatics, gas.

MIXERS—LANCASTER "LW" (Lab), 5 cu. ft. EBG3, EAG3, 9 cu. ft. EAG4, Double Cone ¾ cu. ft.

JAW CRUSHERS — 7½x13 Champion. 20x4 Farrel, 15x24 Traylor, 24x36 Farrel, w/motors.

PEBBLE MILLS—18x18, 24x24, 24x36, 30x30, 54x48, 6x5 porcelain lined, 6x8 Buhrstone.

MILLS HARDINGE—4½x16, 6x22 steel ball, 4½x16, 7x22, 7x48 pebble.

HAMMER MILLS—Raymond 8" Lab (bronze) Mikro 2S1, Jeffrey 24x20, 36x42 B, Williams AKH (25 HP).

SCREENS — 3x5 single (Universal) 3x10, double Tyler, 3x10 Cedar Rapids, 5x12 double Robbins, 40x84 Rotex.

FEEDERS—Vibrating pan 18x60, Jeffrey #4 w/rectifier.

ROTARY DRYERS — 3x20, 39x21, 44x25, 6x40.

AUTOCLAVE—S/S 1 gal., 1000 PSI operating w/150 PSI jacket, 1 HP explosion proof gearmotor.

VACUUM PUMPS—Nash Hytor MD623 & H7, Leiman 105 CFM.

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

IN STOCK

CAPPERS — CENTRIFUGALS — CONDENSERS — DRYERS — EVAPORATORS — FILLERS — FILTERS — FILTER PRESSES — GRINDERS — KETTLES — LABELERS — MILLS — MIXERS — PUMPS — SCREENS — CASE GLUERS — TABLET PRESSES — TANKS — ETC.

WRITE US OR CALL
SEELEY 8-1431
Send us your list of idle machines.

LOEB EQUIPMENT SUPPLY CO.
814 W. Superior St. Chicago 22, Ill.

ECH SPECIALS

Kady & Abbe SS Dispersall Mills.
Sweetland SS #5 Filter, 20 leaves, 3" cent.
Pfaudler glass lined Jktd. Still, 42"x42".
Gen. American 42"x120" Twin Drum Dryer.
Link Belt SS Rotary Dryer 5'x20', complete.
2 Heavy Duty W & P jktd. Mixers, 15 gal. 15 H.P.
3 Read 18"x48" Vibrating Sifters.
Hercules 200 sq. ft. SS Pressure Filter.
Pfaudler glass 1500 gal. Tank, closed top.

New Machinery Div. For New Fabrications
We Buy Complete Plants or Single Units
TEL. SOuth 8-4451—4452—8782
YOU CAN BANK ON
EQUIPMENT CLEARING HOUSE INC.
111 33rd Street Brooklyn 32, N. Y.

GUARANTEED REBUILT PROCESS MACHINERY AT GREAT SAVINGS... PROMPT DELIVERIES!

UNION Rebuilt Machinery Established 1912

Baker Perkins 50 gal. Stainless Steel Steam Jacketed Heavy Duty Mixers with Stainless Jacketed Blades.
Gemco 30 cu. ft. Vacuum Double Cone Blender.
J. H. Day from 12 up to 150 gal. Double Arm Mixers, Cincinnatus and Imperial.
3500 gallon working capacity Steam Jacketed Double Arm Mixing Tanks.
Baker Perkins 150 gal. Double Arm Jacketed Mixer with Vacuum Dome, Jacketed Blades.
MRM Semi Automatic S. S. Vacuum Filler.
Capem 1 Head and 4 Head Cappers.
Resina Model LC Capper.
Mikro 4TH, 3TH, 3W, 2TH, 1SH Pulverizers.
Day 50 to 10,000 lbs. Powder Mixers.

Baker Perkins, Day and Readco Double Arm Mixers, 1 qt. to 200 gal.
Day, Rotex, Robinson, Tyler Hum-mer, Selectro and Gayco Sifters.
Stokes DD2, BB and D3 Tablet Machines.
Transwrap Auger Filler.
Filler, Hope and Elgin Piston Fillers.
Triangle Elec-Tri-Pak Fillers, all models.
Stokes & Smith G1, G2 and HG84 Auger Powder Fillers.
Ceco and Jones Carton Sealers.
Standard Knapp 429 Carton Sealer.
Pony M, ML, TO, Ermold, World and Pneumatic Automatic Labelers.
Standard Knapp, Burt, CRCO Nu-Way Wraparound Labelers.
Package Machinery Co. FA, FA2, FA3, FA4, FAQ Automatic Wrappers.
Hayssen, Oliver, Hudson Sharp, Scandia, Miller Automatic Wrappers.

Over 5000 MACHINES IN STOCK—MIXERS, Labelers, Dryers, Fillers, Sifters, Grinders, Cappers, Pulverizers, Packaging Machines, Carton Sealing Machines.

TELL US ALL YOUR MACHINERY NEEDS

UNION STANDARD EQUIPMENT CO.
318-322 Lafayette Street New York 12, N. Y.

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$5.00, thirty-six words or less; 85c. for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication.

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER
30 Church st., New York 7. N. Y.

BUSINESS OPPORTUNITIES

Wanted: Nitrobenzene odd lots or contract, spot or future, off-grade or prime. Also Barium Nitrate on contract carload monthly. Wanted: Distributors for imported sodium silicofluoride way below schedule; also sodium chlorite. OPD 335.

EQUIPMENT OFFERED

Glass-Lined Tanks—3 only, one-piece glass-lined tanks, manufactured by A. O. Smith, approx. 4,200-gal. each, with stands, immediate delivery, price $700 each, f.o.b. Midwest shipping point, subject to prior sale, details by writing OPD 340.

For Sale—"American Tool & Machine" stainless suspended type centrifugal, 40x24, used few weeks only for concentration of juices, like new, complete with motor, still erected immediate delivery. OPD 341.

Stainless Valves—Three 2" Type 304 stainless gate valves, flanged type, brand new, never used, price $75 each, immediate delivery. OPD 342.

For Sale: 42" x 120" Double Drum Dryer; 42" x 100" Double Drum Dryer; 42" x 90" Double Drum Dryer; 24" x 36" Double Drum Dryer; 93 sq. ft. S.S. Heat Exchanger ASME; Three S.S. Sanitary Heat Exchangers to 150 sq. ft.; 110 gal. S.S. Jacketed blender ASME; 75 gal. S.S. Sigma Blade Jacketed Mixer Best Equipment Company, 1737 Howard Street, Chicago 26, Illinois. AMbassador 2-1452.

Molten Sulfur tank cars for lease: Now in W. Texas; 8 ea 9800-gal. cap. 70-ton trucks, welded coils, steam-jacketed outlet, outside-operated valve mechanism. Prefer minimum 6-month lease, thereafter monthly. OPD 313.

EQUIPMENT OFFERED

For Sale—Nash Hytor vacuum pump, size 3-60, complete with Continental 15 HP, AC motor. Immediate delivery. OPD 343.

EQUIPMENT WANTED

Ross Conical Burr Stone Mill; style 1; size 4; vertical type; with gear drive. Adaptable for grinding lubricating greases. OPD 338.

Stainless Steel flaker drum size about 2 by 4 ft. equipped with steam jacketed pan, doctor knife, etc., must be in good working condition, submit complete details to OPD 339.

FACILITIES OFFERED

Clifton Rt. 3 area, 25,000' 1 story. Realistic sale or lease Modern clean building, offices, power, lighting, extra land. S. A. Mallor Co., 24 Commerce St., Newark, N. J. Mitchell 3-1215.

FOR RENT

Newark, N. J., 16,500 sq ft. desirable industrial property. One and two story brick buildings—sprinklered. High pressure steam. C.R.R.N.J. siding. Excell nt for Chemical manufacturing. 1 minute from Pulaski Skyway and Jersey Turnpike. Principals only. OPD 316.

MATERIALS OFFERED

For Medicinals: 3,000 ozs. Acriflavine USP, original containers—half price; Sodium Bromide—25c. lb.; 250 lbs. Shirlan—$1.50 lb. Industrial By-Products & Surplus Co., 40-40 Lawrence St., Flushing 54, N. Y. INdependence 1-4100.

Dioctyl Phthalate. Have 7255 gallons of prime DOP. Will take 24 cents per pound delivered or best offer. OPD 315.

MATERIALS OFFERED

Perchlorethylene, Waste, off grade, contaminated, surplus stocks. Drums, tank trucks or tank cars. Send full details for cash bid to; Industrial Organics Corporation, P.O. Box 26, Sayreville, New Jersey. Telephone: South Amboy 1-2334.

POSITIONS OFFERED

Industrial Maintenance Sales Products are proven descaling acids, corrosion inhibitors as used in high & low pressure boilers, cooling equipment summer & winter business, sell directly to factories, Users Realty & Hotel operators, Utilities, etc. No wholesaling. Applications considered only from experienced men in several Cities with exclusivity. Generous commissions. Company established over 10 years in business. Do not apply unless you have a following. OPD 344.

Progressive, Expanding chemical organization seeks salesman for selling industrial chemicals to paint, plastic and textile companies. Splendid opportunity. Write resume of experience. Replies strictly confidential. OPD 332.

POSITIONS WANTED

Dye Chemist: Desires situation in N.Y.C. or vicinity. Experienced on all classes of dyes and coaltar pigments. Expert evaluation, identification and matching shades. Moderate salary—excellent service. OPD 337.

REPRESENTATION OFFERED

Importer Wishes to appoint capable distributors in major cities for Potassium Ferricyanide Crystals and Granular, excellent quality packed in fiber drums 110 lbs. net. Continuously available. Highly competitive prices. Write OPD 331.

REPRESENTATION WANTED

New York City firm 50 years established in East covering pharmaceutical, food, chemical, textile and paper industries—desires agency for basic manufacturer of heavy or fine chemicals not currently actively established in this area—New England, New York, New Jersey and Eastrn Pennsylvania. Laboratory and warehousing facilities available—with a well trained sales staff and well-established customer relationships. OPD 336.

SERVICES OFFERED

Complete Distillation facilities for reclaiming all solvents. Blending, filtering and filling of drums from tank cars. Custom chemical processing under laboratory control. Industrial Organics Corporation, P. O. Box 26, Sayreville, New Jersey. Telephone: South Amboy 1-2334.

PHARMACIST

Manufacturing Development

Technical department of major pharmaceutical manufacturer located in Philadelphia desires development pharmacist with B.S. in pharmacy, M.S. in pharmacy, chemistry, biology and four to five years' industrial experience. Liberal benefit program. Send complete resume.

BOX NO. 328
OIL, PAINT AND DRUG REPORTER
30 Church Street, New York 7, N. Y.

ALCOHOLIC BEVERAGE CHEMIST

Well-financed rectifier of alcoholic beverages wants young ambitious energetic beverage chemist for a responsible position with exciting management possibilities.

Applicants must have following qualifications:
- College degree in Chemistry or Chemical Engineering.
- Experience as beverage chemist in production of cordials, liqueurs.
- Experience in blending whiskey desirable.
- Age to 35

Relocation in one of the most splendid cities of the U. S. Send brief resume of qualifications to BOX NO. 334.

OIL, PAINT AND DRUG REPORTER
30 Church Street, New York 7, N. Y.

Public AUCTION Sale

The former research and biological laboratories of SHARP & DOHME—DIVISION OF MERCK & CO., INC. At Glenolden, Penna. (2 miles S.W. of Philadelphia)

★ THE REAL ESTATE—**17 acres—150,000 sq. ft. buildings,** 1200 ft. on main line of P.R.R.—zoned industrial—all utilities —50% mortgage accepted.

★ THE EQUIPMENT—**Valued over $1,000,000.00.** 18 vacuum and freeze dryers—30 ammonia & air compressors—250 tanks (S.S., Copper, Alum., glass lined, etc.—50 to 5,000 gal.)—9 filter presses—20 condensers and surge drums—30 asst. pumps—18 centrifuges—6 sterilizers—6 S.S. stills and columns—25 copper percolators—S.S. rolls and dryer drums—extraction unit (Oliver Filter, Holofite desolventizer, soaker)—2 package boilers—pulverizers, cutters, mixers—Amm. receivers, coolers, 700 el. motors, asst., mostly new—conveyors —variety of maintenance, office, cafeteria and special equipment, etc., etc.

Auction to be held at Glenolden, Penna.
TUESDAY, APRIL 30, 1957
by M. J. WERSHOW AND DAVID WEISZ
Box 3644 — Richmond & Norris Streets, Phila. — NE 4-6444
at Glenolden — LUdlow 6-8599

Inspection Now—Write for Brochure

Bids Wanted

Carbon dioxide, solidified, as required during the period July 1, 1957 through June 30, 1958, inv. 763, May 2, Navy Purchasing Office, 1206 Santee St., Los Angeles 15, Calif.

Casein, 30,000 lbs., in accordance with spec. MIL-C-11532, inv. 86, May 1, Army Chem. Procurement Dist., N. Y., 290 Broadway, N. Y. 7, N. Y.

Chlorine, tech., in Govern, furnished cyls. of 100 lb. capacity, as required during the period ending Nov. 30, 1957, inv. 964, Apr. 29, Navy Purchasing Office, Navy Dept., Naval Supply Activities, N. Y., 3rd Ave. & 29th St., Bklyn. 32, N. Y.

Disinfectant, 2,550 gals. germicidal deodorizing, inv. 731, Apr. 30, yearly requirement, Navy Purchasing Office, 1206 South Santee St., Los Angeles 15, Calif.

Drugs, 25,920 bots. acetylsalicylic acid tabs., 38,208 bots. aluminum hydroxide gel dried tabs., 26,880 bots. penicillin G tabs., 7,200 bots. oleovitamin A capsules, 456 bots. glutamic acid hydrochloride capsules, 480 bots. nicotinic acid tabs., inv. 139, Apr. 23, Military Med. Supply Agency, 84 Sands St., Bklyn. 1, N. Y.

Paint, 6,285 gals. camouflage paint, inv. 1974, Apr. 29, 2,622 1-qt. cans camouflage lacquer, color instrument black AN514, inv. (4)-1962, Apr. 26, 8,300 gals. camouflage lacquer, inv. 1985, May 1, Gen. Stores Supply Office Navy Dept., 700 Robbins Ave., Phila. 11, Pa.; paint, inv. 106, Apr. 26, Purchasing & Contracting Office, Fort Gordon, Ga.; 500 gals. white paint, 200 gals. flat cream, interior paint, inv. 170, Apr. 25, Purchasing & Contracting Office, Fort Benning, Ga.

Propane, 183,600 lbs., as required during fiscal year 1958, inv. 48, Apr. 30, Contracting & Purchasing Office, Chanute AFB, Ill.; propane as required during the period of one year, inv. 100, Apr. 30, Contracting Officer, Atomic Energy Comm., Paducah Area Office, P.O.B. 1213, Paducah, Ky.; 2,500 gals. propane, inv. SES-958, Apr. 24, Gen. Services Adm., Fed. Supply Service, 909 First Ave., Seattle 4, Wash.

Rodenticide, 5,360 2-oz. cans, anticoagulant, concentrate, 4.0% to 4.4% powd., inv. 975, May 9, Navy Purchasing Office, Navy Dept., Naval Supply Activities, N. Y., 3rd Ave. & 29th St., Bklyn. 32, N. Y.

Sodium chloride, 880 tons, inv. 48, Apr. 29, Base Procurement Office, Loring AFB, Maine; 600,000 lbs., type 1, fiscal year requirement, inv. 67, Apr. 23, Phila. Naval Shipyard, Supply Dept., Building #83, Phila. 12, Pa.

Sodium silicofluoride, 200 100-lb. bgs., powd., solubility 0.4%, purity 98.5%, fluorine 60%, inv. 64, Apr. 26, Purchasing & Contracting Office, Ft. Benning, Ga.

Zinc oxide, 310,000 lbs., in accordance with spec. MIL-Z-291B, inv. 85, May 9, Army Chem. Procurement Dist., N. Y., 290 Broadway, N. Y. 7, N. Y.

SURPLUS
Wanted
• Excess Inventory
• Waste Solvents
• Crudes Distilled
INDUSTRIAL BY-PRODUCTS & SURPLUS CO.
Division of Acoto Chemical Co., Inc. • 40-40 Lawrence St.
INdependence 1-4100 Flushing 54, N. Y.

FOR SURPLUS OUTLETS
ONE NAME STANDS OUT...
WANTED
Raw Materials
Finished Products
Equipment—Plants
Components
Wastes—Residues
Entire Inventories Bought
SEND LISTS NOW!
Reference—Dun & Bradstreet
Chemical Service Corp.
88 BEAVER ST. N. Y. 5,
HAnover 2-6970
EST. 1925 Cable address "RETORTS" N. Y.

WANTED
INVENTORY CLOSE-OUT ITEMS
SURPLUS CHEMICALS, PIGMENTS, RESINS, SOLVENTS
BY-PRODUCTS, MIXTURES, OFF-SPEC. MATERIALS
CHEMSOL, INC., • 70 Dod Street, Elizabeth, N. J. • EL 4-7654

we will buy your...
SURPLUS CHEMICALS
SOLVENTS WAXES OILS
RESINS DRUGS ETC.
WIRE OR PHONE
FOR IMMEDIATE ACTION
All offers held in strictest confidence
Barclay CHEMICAL COMPANY, Inc.
77 VARICK STREET NEW YORK 13 N. Y. · WO 4-5120

Advertisers Index

Acme Refining Corporation..... 44
Air Reduction Chemical Co..... 62
Alan Wood Steel Company..... 48
Allied Asphalt & Mineral Corp..... 64
Allied Chemical & Dye Corporation, Nitrogen Division 40, 41
American Agricultural Chemical Co., The... 1
American Cyanamid Company, Intermediates Department 72
American Potash & Chemical Corporation.. 22
Argueso, M., & Co., Inc..... 65
Armour Laboratories, The..... 51
Ashcraft-Wilkinson Co..... 41

Baker, J. T., Chemical Co.....1, 50
Barclay Chemical Company, Inc..... 70
Barnebey-Cheney Co..... 44
Beacon Chemical Industries, Inc.....47, 57
Benzol Products Company..... 55
Berkshire Chemicals, Inc..... 38
Better Finishes & Coatings, Inc..... 40
Bios Laboratories, Inc..... 57
Blockson Chemical Company.....16, 38
Bower, Henry, Chemical Mfg. Co..... 38
Bowman, Charles, & Co..... 57
Brill Equipment Company..... 67
Brode Corporation, The..... 66
Bush, W. J., & Co., Inc..... 60

Carbide & Carbon Chemicals Company, Division Union Carbide & Carbon Corporation 2, 44
Celanese Corporation of America, Chemical Division 72
Chemical Insecticide Corp..... 41
Chemical Manufacturing Co., Incorporated.. 38
Chemical & Process Machinery Corp..... 68
Chemical Service Corp..... 70
Chemical Solvents, C. P., Incorporated..... 72
Chemirad Corporation..... 44
Chemo Puro Manufacturing Corp..... 42
Chemsol, Inc..... 70
Ciba Company, Inc..... 48
Columbia Southern Chemical Corporation 29, 36
Commercial Solvents Corporation..... 6
Concord Chemical Company..... 47
Consolidated Products Company, Inc..... 69
Consulting Chemists and Engineers..... 54
Coupe, Robert A..... 36
Cowles Chemical Company..... 28
Croda, Incorporated..... 64

Davison Chemical Company..... 24
Dickerson Company, The..... 41
Distillation Products Industries, Div. of Eastman Kodak Company..... 35
Doggett, Stanley, Inc..... 62
Dow Chemical Company, The.....23, 49
Dunkel, Paul A., & Company, Inc..... 53
Du Pont de Nemours, E. I., & Co., (Inc.)... 49
Duval Sulphur & Potash Co..... 41

Eastman Chemical Products, Inc.....17, 63
Emery Industries, Inc..... 66
Enjay Company, Inc..... 26
Equipment Clearing House, Inc..... 69

Felton Chemical Company, Inc..... 60
Fezandie & Sperrle..... 61
First Machinery Corp.....67, 68, 69
Florasynth Laboratories, Inc..... 58
Fritzsche Brothers, Inc..... 58

Gane's Chemical Works, Inc..... 55
Gelb, R., & Sons, Inc..... 69
General Chemical Division Allied Chemical & Dye Corporation..... 30
General Equipment & Trading Co..... 63
General Mills, Inc..... 62
Grace Chemical Company..... 63
Greeff, R. W., & Co.....1, 51
Gregory, Walter C., Corporation..... 57
Gross, A., & Company..... 65

Hall, C. P., Co., The..... 53
Harchem Division, Wallace & Tiernan, Inc.. 43
Heat & Power Co., Inc..... 68
Heyden Newport Chemical Corporation.... 40
Hoffmann-La Roche, Inc.....28a
Hooker Electrochemical Company..... 39
Hutchinson, D. W., & Co., Inc..... 58

Industrial By-Products & Surplus Co..... 70

Koppers Company, Inc.....12, 46

Lawler Company..... 69
Lemke, B. L., Co., Inc..... 55
Lever Brothers Company..... 42
Loeb, H., & Son..... 68
Loeb Equipment Supply Co..... 69

Machinery & Equipment Co., Inc..... 67
Machinery & Equipment Corp..... 68
Magnus, Mabee & Reynard, Inc..... 58
Matheson Coleman & Bell Division of The Matheson Company, Inc..... 57
Mathieson Chemicals, Olin Mathieson Chemical Corporation..... 43
Merck & Co., Inc.....8, 39
Metalsalts Corporation..... 53
Michel, M., & Company, Inc..... 72
Michigan Chemical Corporation..... 20
Monsanto Chemical Company..... 38
Mutual Chemical Division, Allied Chemical & Dye Corporation..... 15
Mutual Citrus Products Company..... 59

Naftone, Inc..... 44
Neville Chemical Co..... 48

Olin Mathieson Chemical Corporation Industrial Chemicals Division..... 43
Oronite Chemical Company..... 36

Parsons-Plymouth, Inc., M. W..... 64
Peerless Oil & Chemical Corp..... 72
Penick, S. B., & Company..... 52
Pennsylvania Refining Company..... 45
Pennsylvania Salt Manufacturing Co., Industrial Division..... 1
Perry Equipment Corp..... 68
Pfaltz & Bauer, Inc..... 57
Pfizer, Chas., & Co., Inc..... 19
Phelps Dodge Refining Corporation..... 37
Philipp Brothers Chemicals, Inc..... 61
Pitt-Consol Chemical Co..... 49
Pittsburgh Coke & Chemical Co..... 47
Polak & Schwarz, Inc..... 60
Polak's Frutal Works..... 58
Potash Company of America..... 41
Prior Chemical Corporation..... 1
Process Plants Service, Inc..... 68
Procter & Gamble Co..... 42
Publicker Industries, Inc..... 10

Quaker Oats Co., The..... 21
Quaker State Oil Refining Corp..... 64

Raney Catalyst Co..... 42
Read, Chas. L., & Co., Inc..... 36
Reichhold Chemicals, Inc..... 18
Rhodia, Inc..... 60
Richmond Mica Corp..... 63
Richter, Gedeon Pharmaceutical Products, Inc. 57
Robeco Chemicals, Inc..... 72

St. Joseph Lead Co..... 63
Sergeant, E. M., Pulp & Chemical Co., Inc.. 40
Shell Chemical Corporation..... 11
Sinclair Chemicals, Inc..... 33
Solvay Process Div., Allied Chemical & Dye Corporation 31
Spencer Chemical Company..... 44
Stauffer Chemical Company..... 13
Stein Equipment Co..... 68
Strohmeyer & Arpe Co..... 66
Sunkist Growers, Inc..... 25
Swift & Company..... 65

Texas Gulf Sulphur Co., Inc..... 37
Thurston & Braidich..... 52
Todd, A. M., Company..... 58
Tragacanth Importing Corp..... 53

Ungerer & Co..... 59
Union Carbide & Carbon Corporation, Carbide & Carbon Chemicals Company Division 2, 44
Union Standard Equipment Co..... 69
United Box & Lumber Co..... 38
U. S. Borax & Chemical Corporation Pacific Coast Borax Company Division..... 1

Vanadium Corp. of America.....27
van Ameringen-Haebler, Inc..... 60

Wershow & Weisz..... 70
Will & Baumer Candle Co., Inc..... 66
Wyandotte Chemicals Corporation..... 39

Zinsser & Company, Inc., Subsidiary of The Harshaw Chemical Co..... 61

Ethylene Plant

—Continued from page 5

Continental Oil Company by whom PCI is jointly owned.

Ethylene will be made in two grades—the top grade 99.8 percent pure, the second 98.5 percent. Byproducts will be 95 percent pure propylene, C4S, and an aromatic distillate.

The cracking section of the plant features an improved Lummus heater. Equipment in the Lummus-designed low-temperature fractionation unit includes 12,500-horsepower gas turbines which drive the centrifugal charge and refrigeration compressors. The exhaust from these turbines gerenates high-pressure steam in three waste heat boilers. The system utilizes high efficiency expanders to recover very low temperature refrigeration.

This plant brings the total of Lummus-designed ethylene plants to fourteen, with a combined capacity of over 3 million pounds per day.

Part of the new plant's ethylene output will be sold to Calcasieu Chemical Corporation, which will use it to produce ethylene oxide and glycol in a plant adjacent to the ethylene unit. Lummus is currently designing and will build the Calcasieu installation.

Monsanto Chairman

—Continued from page 3

and which we can anticipate—good and bad—have been taken into our accounts. Here are some:

"We did not see the bottom of nitrogen prices last year. Had we realized the same net prices this first quarter as in the first quarter of 1956, this year's earnings would have been better," Mr. Queeny explained.

"We face lower prices for our styrene. Styrene is a large-volume product in Monsanto. Synthetic rubber producers are our largest customers.

"The lower prices for the ammonia and styrene are forecast to cost us this year something of the magnitude of 17 cents a share. Our appraisals of the prospects for most other products are in the main optimistic, and in our projections their improvement offsets these losses. For the year 1957, we are budgeting Monsanto proper to realize a modest increase in profits over 1956.

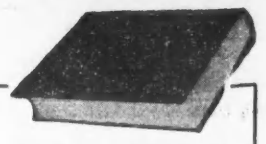
"Most of the pain of these lower prices will be minimized in time by increased usages which we expect will be stimulated," Mr. Queeny concluded.

SILICONES AND THEIR USES

by Rob Roy McGregor

Administrative Fellow, Silicone Fellowship, Mellon Institute

238 pages, 5½ x 8, 29 illustrations, 31 tables, $6.00



Shows how silicones are being used in such industries as:
Dyeing and finishing textiles
Paper coating and glazing
Paints, varnishes, etc.
Industrial chemicals
Tires and inner tubes
Iron and steel foundries
Electrical equipment for motor vehicles, aircraft and locomotives
Communication equipment
Motor vehicles and motor vehicle equipment
Aircraft and parts
Railroad equipment
Mechanical measuring and controlling instruments and many more

Here's practical, positive help for the man who must have an overall picture of what silicons are and what they can do to keep his own work abreast of this great technological advance.

For engineers, chemists, designers, and all who can or do use silicones, this manual provides a correlated source of the available information on properties, preparation, and applications of silicones—treats this important subject a. non-technically as possible for maximum understanding and usefulness to you.

It covers all the commercially available silicone products . . lists industries and the known uses they make of silicones, plus cost considerations . outlines the history of silicone development, its possible uses in medicine and pharmacy, and the elementary chemistry of preparation of silicones from raw material to finished product.

AUTHORITATIVE, SIMPLE EXPLANATIONS

Heading the Corning Glassworks Fellowship on the chemistry of organosilicon compounds for the past 15 years, Mr. McGregor has been granted 23 patents on silicone products and processes. He speaks with authority as he explains simply and in as non-chemical language as possible all the commercial products available—silicone fluids, silicone compounds, silicone lubricants, silicone resins, silicone rubbers, and "bouncing putty"—shows you their chemical and physical behavior—describes methods of applications in your own and allied industries.

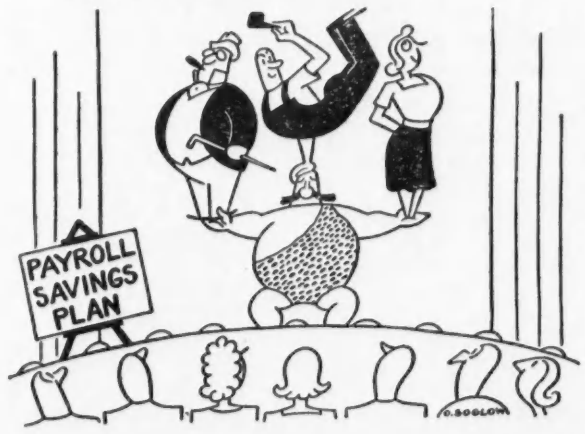
To guide you right to the information you need, a 20-page list of industries tabulates all the known uses of silicones, a variety that ranges from electrical insulation to car polishes from de-icing elements on jets to silicone-based paint, from water-repellent fabrics to eyeglass tissues—a variety that sees "Contains Silicone" appearing on the labels of more a id more products every day.

Check these questions on dimethyl silicone fluids—typical of those answered on many products in this book.
How well do they resist fire and flame?
What's their effect on organic rubber, metal?
What are boiling and freezing points?
How water repellent are they?
What's their surface tension compressibility?
Do they transmit light and sound?
How do they work as films on glassware, in polish?
How do they affect paint, waxes, rubber?
How do they serve as mold release antifoam agents?
How do they serve as hydraulic fluid or as fluid springs?

Send Remittance to

SCHNELL PUBLISHING COMPANY, INC.
30 CHURCH STREET, NEW YORK 7, N. Y.

"Got A Load On Your Mind? I Haven't"



Nothing gives employees a more luxurious, satisfied feeling than that of financial security. And nothing is easier for them to achieve when you provide the convenience of automatic Payroll Savings Plan.

EVERYBODY BENEFITS

Security breeds confidence—and confidence stimulates job interest and results in steadier people who are far more efficient in their work. Receiving those crisp Bonds at regular intervals along with their paycheck is an added inducement for employees to stay on the job.

Moreover, when you install the Payroll Savings Plan in your company, you promote not only the security of your personnel but the security of your company and your country. Over forty million Americans already have over 40 billion dollars invested in United States Savings Bonds—a tremendous backlog of purchasing power for the future.

EASY TO INSTALL

If your company does not now have a Payroll Savings Plan, or if employee participation is less than 50%, a letter to: Savings Bonds Division, U.S. Treasury Department, Washington, D.C., will bring prompt assistance from your State Director. He will provide application cards, promotional material, and as much personal help as you need.

The United States Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the Advertising Council and

OIL, PAINT and DRUG REPORTER

GLYCOL ETHERS

Methyl "Cellosolve"* — "Cellosolve"* Solvent — Butyl" Cellosolve"*

* Registered Trade Mark U. C. & C. C.

THE CP

CHEMICAL SOLVENTS

INCORPORATED

60 PARK PLACE, NEWARK 2, NEW JERSEY — MArket 2-3650 WOrth 2-7763

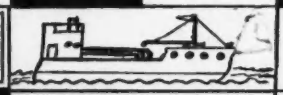
YOUR CONTACT WITH THE WORLD'S MARKETS — ROBECO — ESTABLISHED 1918

GLYCINE N.F. (Amino Acetic Acid)
MONOCHLORACETIC ACID
SODIUM CHLORACETATE

SOLE U. S. SELLING AGENTS
for
EXPLOITATIE MAATSCHAPPIJ STORK-CHEMIE N.V.
HENGELO, HOLLAND

ROBECO CHEMICALS, INC.

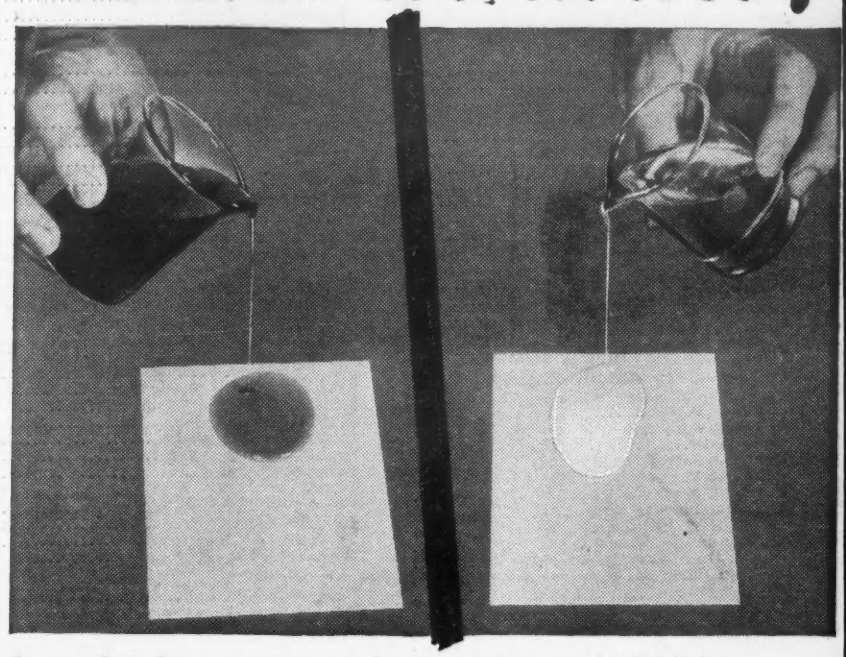
25 EAST 26th ST., NEW YORK 10, N. Y.
CABLE ADDRESS "RODRUG" N. Y. ALL CODES
MUrray Hill 3-7500

	BENZOL	TOLUOL	XYLOL	HI-FLASH	NAPHTHAS
GLYCOLS			ALCOHOLS	ESTERS	KETONES
AMINES	PLASTICIZERS				AMMONIA
PERC	TRICHLOR	CARBON TET	CHLOROTHENE		

PEERLESS OIL & CHEMICAL CORP.

P.O. BOX 230, LONG ISLAND CITY 1, NEW YORK
STillwell 4-8960
A Carey Bros. Industry

COMPARE THE CLARITY!



Even after long storage, Celanese Solvent 601 inhibits discoloration of nitrocellulose lacquers

After twenty-five weeks in jars containing steel balls, lacquer on right, containing 12% of Celanese Solvent 601, shows little or no discoloration. Lacquer on left, containing standard solvents, shows marked discoloration.

Color stability is just one of the reasons why you should consider CS 601 as a low-cost replacement for MEK in either vinyl or nitrocellulose formulations. In solvent power, evaporation rate and other working properties, it is interchangeable with MEK.

Write for new technical bulletin to Celanese Corporation of America, Chemical Division, 180 Madison Ave., New York 16.

Celanese CHEMICALS

Celanese®

EXPORT SALES: Amcel Co., Inc. and Pan Amcel Co., Inc., 180 Madison Avenue, New York 16, N.Y.

Big tonnage uniformity is reason chem-men re-order "CACHALOT" fatty alcohols

Growing use for lauryl, cetyl, stearyl, and oleyl

New aliphatics data guide available

Chem-men who plan tomorrow's products are discovering fatty alcohols—a direct route to profitable lube additives, protective coatings, detergents, plasticizers, and process intermediates. Chemical buyers agree that CACHALOT brand lauryl, cetyl, stearyl, and oleyl alcohols offer big tonnage uniformity that leads to better end-products.

Process Control

You can duplicate laboratory results in your plant runs with CACHALOT fatty alcohols. These straight chain aliphatics are made to tight specifications by modern techniques of high-pressure hydrogenation and vacuum distillation. Greater lot-to-lot uniformity means cleaner reactions without formula-juggling.

Cut to Fit

Custom blends of CACHALOT fatty alcohols are available if one of the many basic types of NF, USP, TGA, or technical grades will not meet your needs. Deliveries are prompt, backed by people who've been in this line for over a quarter century.

Fresher, Cleaner

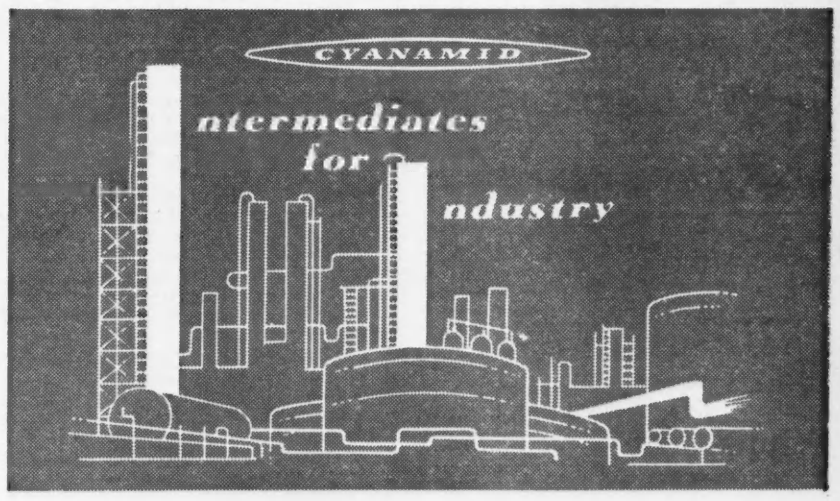
Careful packing keeps CACHALOT alcohols clean, simplifies handling. Flaked or cast white cetyl and stearyl alcohols are packed in polyethylene-lined cartons or multiwall bags; clear liquid lauryl and oleyl alcohols in uniform weight steel drums; bulk quantities in steamed-cleaned coiled tank cars.

Facts on File

Want to find out more? There's a new booklet full of facts on these versatile organic chemicals, telling how they can be used in your product or process. Purchasing and production men, researchers and development chemists are invited to write for the *"Survey of Fatty Alcohols"*. Why not clip this advertisement to your letterhead, sign your name, and mail it this afternoon? CACHALOT: reg. trade name

MICHEL

M. Michel and Company, Inc.
90 Broad Street, New York 4



ANTHRAQUINONE

in technical and electrical grades

Anthraquinone is widely used as an intermediate in the manufacture of vat dyes, oil colors and dyes for acetates and the newer synthetics.

Other applications include catalytic heat-bodying of drying oils, and impregnation of paper dielectrics to inhibit electrical breakdown.

Cyanamid's electrical grade anthraquinone is manufactured to meet rigid specifications on iron content and conductivity of water extract.

A new comprehensive data sheet on anthraquinone is available from Cyanamid. The detailed information on test methods will be of particular value to current users.

CYANAMID

AMERICAN CYANAMID COMPANY
Intermediates Department
Bound Brook, New Jersey